

REDACTED VERSION

ADMINISTRATIVE RECORD INDEX

FINAL

SITE NAME: GRANT ROAD DRUMS
TXD93305195

SITE NUMBER: TXD G2

INDEX DATE: 10/25/90

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RECORDS
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~~re-referenced~~
NL Vol 1

GRANT ROAD DRUMS

TXD G2

The Administrative Record Index is arranged with the following structure:

I. CHRONOLOGICAL LISTING

This section of the index contains all records of the file arranged chronologically.

II. CATEGORIZED LISTING

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1.0 SITE IDENTIFICATION

- 1.1 Background Information
- 1.2 Notification/Site Inspection Reports
- 1.3 Preliminary Assessment (PA) Report
- 1.4 Site Investigation (SI) Report
- 1.5 Previous Operable Unit Information

2.0 REMOVAL RESPONSE

- 2.1 Sampling and Analysis Plans
- 2.2 Sampling and Analysis Data/Chain of Custody
- 2.3 EE/CA Approval Memorandum
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- 2.5 Action Memorandum
- 2.6 Amendments to Action Memorandum

3.0 REMEDIAL INVESTIGATION (RI)

- 3.1 Sampling and Analysis Plan (SAP)
- 3.2 Sampling and Analysis Data/Chain of Custody
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- 3.4 RI Reports

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- 5.3 Explanations of Significant Differences

6.0 STATE COORDINATION

- 6.1 Cooperative Agreements/SMOAs
- 6.2 State Certification of ARARs

7.0 ENFORCEMENT

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- 7.3 Administrative Orders
- 7.4 Consent Decrees
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 - 10.5 Documentation of Other Public Meetings
 - 10.6 Fact Sheets and Press Releases
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- 11.0 TECHNICAL SOURCES AND GUIDANCE DOCUMENTS
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* I. CHRONOLOGICAL LISTING *

ADMINISTRATIVE RECORD INDEX

FINAL

SITE NAME: GRANT ROAD DRUMS
SITE NUMBER: TXD G2

DOCUMENT NUMBER: 000001 - 000001
DOCUMENT DATE: 06/26/87
NUMBER OF PAGES: 1
AUTHOR: James C. Staves, OSC, ERB
COMPANY/AGENCY: U.S. EPA Region 6
RECIPIENT: U.S. EPA Region 6 Site Files
DOCUMENT TYPE: Memorandum
DOCUMENT TITLE: Notification from EPA concerning Grant Rd Drum Site; and, discussion regarding the Site Assessment.

DOCUMENT NUMBER: 000002 - 000002
DOCUMENT DATE: 06/29/87
NUMBER OF PAGES: 1
AUTHOR: James C. Staves, OSC, ERB
COMPANY/AGENCY: U.S. EPA Region 6
RECIPIENT: U.S. EPA Region 6 Site Files
DOCUMENT TYPE: Memorandum
DOCUMENT TITLE: Site inspection, at which a total of sixty drums were identified and four samples were collected.

DOCUMENT NUMBER: 000003 - 000031
DOCUMENT DATE: 07/30/87
NUMBER OF PAGES: 29
AUTHOR: Michael Daggett, Chief, Organic Lab Section, Houston Branch
COMPANY/AGENCY: U.S. EPA Region 6
RECIPIENT: Diana Ayers, Chief, U.S. EPA Region 6 - Houston Branch
DOCUMENT TYPE: Memorandum
DOCUMENT TITLE: Organic Laboratory results for the Grant Road Site 7TFAKC1201 through 7TFAKC1204. This is a final report.

DOCUMENT NUMBER: 000032 - 000052
DOCUMENT DATE: 09/10/87
NUMBER OF PAGES: 21
AUTHOR: Richard Yeager, TAT Member, Houston
COMPANY/AGENCY: U.S. EPA Region 6
RECIPIENT: James Staves, OSC, ERB, U.S. EPA Region 6
DOCUMENT TYPE: Report
DOCUMENT TITLE: Site Assessment and Sampling Mission at Grant Road Drum Site, where abandoned drums were reported in the north part of Houston. TAT investigated the area.

ADMINISTRATIVE RECORD INDEX

FINAL.

SITE NAME: GRANT ROAD DRUMS
SITE NUMBER: TXD G2

DOCUMENT NUMBER: 000053 - 000053
DOCUMENT DATE: 09/11/87
NUMBER OF PAGES: 1
AUTHOR: James C. Staves, OSC, ERB
COMPANY/AGENCY: U.S. EPA Region 6
RECIPIENT: U.S. EPA Region 6 Site Files
DOCUMENT TYPE: Project Notes
DOCUMENT TITLE: Emergency Response Preliminary Assessment comments

DOCUMENT NUMBER: 000054 - 000077
DOCUMENT DATE: 10/23/87
NUMBER OF PAGES: 24
AUTHOR: Diana Ayers, Chief, Houston Branch
COMPANY/AGENCY: U.S. EPA Region 6
RECIPIENT: Charles Gazda, Chief, ERB, U.S. EPA Region 6
DOCUMENT TYPE: Memorandum and Attachments
DOCUMENT TITLE: Laboratory results for Grant Road Drum Site, two water samples, one soil sample, and one oil sample. This was a final report.

DOCUMENT NUMBER: 000078 - 000091
DOCUMENT DATE: 11/16/87
NUMBER OF PAGES: 14
AUTHOR: Technical Assistance Team
COMPANY/AGENCY: Ecology and Environment, Inc.
RECIPIENT: J. Chris Petersen, Deputy Project Office, ERB, U.S. EPA Region 6
DOCUMENT TYPE: Site Assessment Report
DOCUMENT TITLE: Site Assessment and Sampling Grant Road Drum Site, Houston, Harris County, Texas, with attachments (Contains Draft Removal Action Memorandum, Site Map and Sketch, etc)

DOCUMENT NUMBER: 000092 - 000092
DOCUMENT DATE: 08/12/88
NUMBER OF PAGES: 1
AUTHOR: Hazardous Waste Management Division
COMPANY/AGENCY: None Specified
RECIPIENT: Robert E. Layton, U.S. EPA Region 6
DOCUMENT TYPE: Action Memorandum
DOCUMENT TITLE: Enforcement Confidential

ADMINISTRATIVE RECORD INDEX

FINAL

SITE NAME: GRANT ROAD DRUMS
SITE NUMBER: TXD G2

DOCUMENT NUMBER: 000093 - 000099
DOCUMENT DATE: 08/12/88
NUMBER OF PAGES: 7

AUTHOR: James C. Staves, OSC, ERB, Field Response Section
COMPANY/AGENCY: U.S. EPA Region 6
RECIPIENT: Robert E. Layton Jr., P.E., Regional Administrator, U.S. EPA
Region 6

DOCUMENT TYPE: Action Memorandum
DOCUMENT TITLE: The proposed action involves moving sixty 55-gallon drums
suspected to contain waste solvents and paint pigments, from
an unused field in Houston, Texas

6/25/87

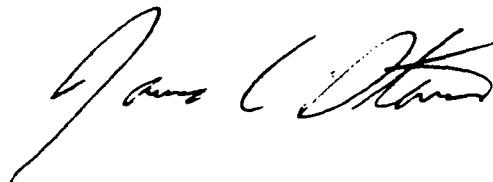
6/25/87

SUBJECT: Grant Road Drum Site

.. On 6/25/87 Kendall Young, of the EPA Houston, ap informed me that he has received a complaint from (b) (6) of Warner Cable Co. about an abandoned drum storage site located at 9608 Grant Rd, Houston, Tx. I called (b) (6) and obtained information necessary to complete an incident notification report. (b) (6) reported seeing about 50 drums. 3 of which were labelled ammucrous aluminum chloride, a compound that reacts explosively with water. The drums were reportedly about 200 ft from a strip mall, and 1300 ft from a child day care facility.

E. At 1300 hrs, 6/25/87, I verbally instructed TAT to perform an immediate site inspection and issued TDD No. 8706-37. I also informed TAT that I would be travelling to the site on 6/29/87 and requested that they accompany me and collect soil samples for priority pollutant analyses. I notified Connie Gucci, EPA Houston lab, that we would be bringing the samples to them on 6/29/87. I contacted Mr. Dave Barker of the TWC and told him about the site and my intention to perform a site assessment.

3. At 1500 hrs, 6/25/87, I was contacted by Mr. Jerry Spetseris of the TWC, who informed me that they were familiar with the site and that a DRA was coordinating with them and would obtain a contractor to perform site cleanup. However, a thorough site inspection had not been performed and no samples had been analysed. Therefore I decided to continue with the site assessment.



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MEMORANDUM FOR RECORD

6/29/87

SUBJECT: Grant Road Drum Site

1. At 0740 hrs, 6/29/87, I arrived at Houston Intercontinental Airport, where I was met by TAT representatives Edward Fry, Richard Yeager, and Jack McLaughlin. We traveled to the site and, established a base of operations on FM Road 149, near an abandoned mobile home. We were met there by Mr. Jerry Soetseris of TWC.

2. With the assistance of Mr. Soetseris, we performed a site inspection and identified a total of 60 drums. 49 of the drums were neatly stacked along a fence on the southern border of the property and the remaining 11 were scattered along the northern boundary. The stacked drums appeared to be in good condition, while those scattered on the northern property boundary were corroded and several contained holes or had been opened. Mr. Soetseris had previously examined the contents of one of the open drums and described it as being a "paint like" substance.

3. In accordance with my instructions, TAT collected 4 soil samples for priority pollutant analyses. Sample 1 was taken near a cluster of three drums on the northern site boundary. Samples 2, 3, and 4 were taken near the stacked drums on the southern boundary. Level B protective clothing was worn during sample collection.

4. The samples were delivered to the EPA Houston Lab by the TAT crew.

5. The site is well concealed by vegetation, and at present there are no signs of human disturbance. Most of the drums appear to be intact and there is no evidence of any significant leakage. Many of the wooden pallets on which the drums are sitting are in advanced stages of decay, which indicates that the site is probably several years old. It is unlikely that the drums contain aluminum chloride, as labelled.

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000002



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION VI

HOUSTON BRANCH

6608 HORNWOOD DRIVE

HOUSTON, TEXAS 77074

MEMORANDUM

Date: 7/30/87

Subject: Organic Laboratory Results for Grant Road Site (7TFAKC12)

From: *Michael J. Daggett*
Michael Daggett, Chief, Organic Lab Section, 6E-HL

To: Diana Ayers, Chief, Houston Branch, 6E-H

Attached are the Organic Laboratory results for samples 7TFAKC1201 through 7TFAKC1204. These samples were analyzed for VOAs, ABNs, Pesticides, and Herbicides. No VOAs were detected. In sample 7TFAKC1201 (ABN), bis (2-Ethylhexyl) Phthalate was found at a concentration of 15,500 ug/kg. In samples 7TFAKC1203 and 7TFAKC1204 (ABN), several unknown peaks were found along with Gamma-Chlordane as a Tentatively Identified Compound in 7TFAKC1204. No Pesticides or Herbicides were detected.

This is a final report.

Attachments

000003

Date: 07/30/87

19+

Appendix (

U. S. ENVIRONMENTAL PROTECTION AGENCY
ENVIRONMENTAL SERVICE DIVISION
HOUSTON LABORATORY SECTION

LAB SAMPLE REPORT

Activity Number: 7TFAKC12 Date Recvd: 08/30/87 Date Collected: 08/28/87
Sample Number: 1 Time Recvd: 08:00 Time Collected: 11:15

Source: GRANT RD Tag Number:

Site Description: Sta#01 Sta 01 site sketch

Sample Type: SOIL

Sample Retention:

Param- Organic: ABN PCB PES VOA

Metals: MET

Inorganic: CN

Biology:

Due Date: 07/28/87

Date Projected: 07/28/87

Date Completed: 07/30/87

Comment:

Your Initials: LC

000004

2/29

ORGANIC ANALYSIS DATA

6ES-HL SAMPLE NO.: 7TFAKC12-01

DATE REPORTED: 7/27/07

SAMPLE TYPE: SOIL

ANALYST: MARVELYN HUMPHREY

HSL ACID BASE/NEUTRAL COMPOUNDS BY METHOD 625

COMPOUND	ug/KG	COMPOUND	ug/KG
Phenol	nd dl=440	Acenaphthene	nd dl=220
bis(2-Chloroethyl) Ether ..	nd dl=220	1,2,4-Dinitrophenol	nd dl=3300
2-Chlorophenol	nd dl=440	1,4-Nitrophenol	nd dl=860
1,3-Dichlorobenzene	nd dl=220	Dibenzofuran	nd dl=220
1,4-Dichlorobenzene	nd dl=220	1,2,4-Dinitrotoluene	nd dl=660
Benzyl Alcohol	nd dl=440	1,2,6-Dinitrotoluene	nd dl=660
1,2-Dichlorobenzene	nd dl=220	Diethyiphthalate	nd dl=220
2-Methylphenol	nd dl=660	4-Chlorophenyliophenyl Ether ..	nd dl=880
bis(2-chloroisopropyl) Ether ..	nd dl=220	Fluorene	nd dl=220
4-Methylphenol	nd dl=660	4-Nitroaniline	nd dl=440
N-Nitroso-Di-n-Propylamine ..	nd dl=660	4,6-Dinitro-2-Methylphenol ..	nd dl=2200
Hexachloroethane	nd dl=220	N-Nitrosodiphenylamine ..	nd dl=440
Nitrobenzene	nd dl=220	4-Bromophenyliophenyl Ether ..	nd dl=660
Isophorone	nd dl=440	Hexachlorobenzene	nd dl=220
2-Nitrophenol	nd dl=440	Pentachlorophenol	nd dl=440
2,4-Dimethylphenol	nd dl=660	Phenanthrene	nd dl=440
Benzoic Acid	nd dl=1100	Anthracene	nd dl=440
bis(2-Chloroethyl)Methane ..	nd dl=220	Di-n-Butyiphthalate	nd dl=720
2,4-Dichlorophenol	nd dl=660	Fluoranthene	nd dl=220
1,2,4-trichlorobenzene	nd dl=220	Benzidine	nd dl=2200
Naphthalene	nd dl=220	Pyrene	nd dl=220
4-Chloroaniline	nd dl=440	Butylbenzylphthalate	nd dl=440
Hexachlorobutadiene	nd dl=220	1,3,3'-Dichlorobenzidine ..	nd dl=1100
4-Chloro-3-Methylphenol ...	nd dl=880	Benzo(a)Anthracene	nd dl=3300
2-Methylnaphthalene	nd dl=220	bis(2-Ethylhexyl)Phthalate ..	13300
Hexachlorocyclopentadiene..	nd dl=1100	Chrysene	nd dl=3300
2,4,6-Trichlorophenol	nd dl=660	Di-n-Octyl Phthalate	nd dl=440
2,4,5-Trichlorophenol	nd dl=660	Benzo(b)Fluoranthene	nd dl=3300
2-Chloronaphthalene	nd dl=220	Benzo(k)Fluoranthene	nd dl=880
2-Nitroaniline	nd dl=880	Benzo(a)Pyrene	nd dl=3300
DimethylPhthalate	nd dl=220	Indeno(1,2,3-cd) Pyrene ..	nd dl=660
Acenaphthylene	nd dl=220	Dibenzo(a,h)Anthracene	nd dl=220
3-Nitroaniline	nd dl=880	Benzo(g,h,i)Perylene	nd dl=660

000005

3/29

ORGANIC ANALYSIS DATA

TEST #6: SAMPLE NO.: ZTTAKC1201

DATE REPORTED: 07/16/87

SAMPLE TYPE: SOIL

ANALYST: R.A. MC MILLIN

VOLATILE COMPOUNDS BY METHOD 624

ITEM	CASE#	(ug/Kg)
	67-64-1	ND DL= 50
(2V)	107-62-8	ND DL= 1000
(3V)	107-13-1	ND DL= 1000
(4V)	71-43-2	ND DL= 20
	70-93-3	ND DL= 50
	75-15-0	ND DL= 10
(6V)	56-23-5	ND DL= 20
(7V)	108-90-7	ND DL= 20
(10V)	107-06-2	ND DL= 20
(11V)	71-55-6	ND DL= 20
(13V)	75-34-3	ND DL= 20
(14V)	79-00-5	ND DL= 20
(15V)	79-34-5	ND DL= 20
(16V)	75-00-3	ND DL= 50
(23V)	67-66-3	ND DL= 20
(29V)	75-35-4	ND DL= 20
(36V)	156-60-5	ND DL= 20
(32V)	79-07-5	ND DL= 20
(33V)	10061-02-6	ND DL= 20
	10061-01-5	ND DL= 20
(38V)	100-41-4	ND DL= 20
	519-76-6	ND DL= 50
	108-10-1	ND DL= 50
(44V)	75-09-2	ND DL= 20
(45V)	74-87-3	ND DL= 50
(46V)	74-83-9	ND DL= 50
(47V)	75-25-2	ND DL= 20
(48V)	75-27-4	ND DL= 20
(51V)	124-48-1	ND DL= 20
	100-42-5	ND DL= 50
(85V)	127-18-4	ND DL= 20
(86V)	109-68-3	ND DL= 20
(87V)	79-01-6	ND DL= 20
	108-05-4	ND DL= 50
(88V)	75-01-4	ND DL= 50
	108-38-3	ND DL= 50
	75-47-6	ND DL= 50
	106-42-3	ND DL= 50

000007

5/29

ORGANIC ANALYSIS DATA

6ES-HIL SAMPLE NO.: 7TFAKC1201

DATE REPORTED: 07/10/87

SAMPLE TYPE: SOIL

ANALYST: R.A. MCMILLIN

TENTATIVE COMPOUNDS BY METHOD 624

~~TEST. CONC1~~

SCAN#1 CAS # 1 (ug/Kg)

COMPOUND NAME

| No VOA TIC's detected.

6/29

ANALYSTS AGREE THAT THIS SAMPLE LITERALLY AND FINALLY IDENTIFIED AS
 PESTICIDE AND THAT THE FOLLOWING SUBSTANCES ARE PRESENT IN THE SAMPLE.
 THE LIST IS NOT EXHAUSTIVE, BUT THE ANALYSTS HAVE IDENTIFIED THESE COMPOUNDS
 AS THE MOST PROBABLE IN THIS SAMPLE. THE LIST IS NOT EXHAUSTIVE.

000008

PESTICIDE/PCB ANALYSIS

6ES-HL SAMPLE NO.: 7TFAKC1201

DATE REPORTED: 7/29/87

SAMPLE TYPE: SOIL

ANALYST: L.C. MINER, JR., CHIMIST

PP#	CAS#		UG/G (PPM)
(89P)	309-00-2	aldrin -----	ND DL=< 0.04
(90P)	60-57-1	deildrin -----	ND DL=< 0.08
(91P)	57-74-9	chlorodane -----	ND DL=< 0.20
(92P)	50-27-3	4,4'-DDT -----	ND DL=< 0.08
(93P)	72-55-9	4,4'-DDE -----	ND DL=< 0.08
(94P)	72-54-8	4,4'-DDD -----	ND DL=< 0.08
(95P)	115-29-7	a-endosulfan -----	ND DL=< 0.04
(96P)	115-29-7	b-endosulfan -----	ND DL=< 0.04
(97P)	1031-07-8	endosulfan sulfate -----	ND DL=< 0.08
(98P)	72-20-8	endrin -----	ND DL=< 0.08
(99P)	7421-93-4	endrin aldehyde -----	ND DL=< 0.08
(100P)	76-44-8	heptachlor -----	ND DL=< 0.04
(101P)	1024-57-3	heptachlor epoxide -----	ND DL=< 0.04
(102P)	319-84-6	a-BHC -----	ND DL=< 0.04
(103P)	319-85-7	b-BHC -----	ND DL=< 0.04
(104P)	319-86-8	d-BHC -----	ND DL=< 0.08
(105P)	58-89-9	g-BHC (lindane) -----	ND DL=< 0.04
(106P)	53469-21-9	PCB-1242 -----	ND DL=< 1.00
(107P)	11097-69-1	PCB-1254 -----	ND DL=< 1.00
(108P)	11104-28-2	PCB-1221 -----	ND DL=< 1.00
(109P)	11141-16-5	PCB-1232 -----	ND DL=< 1.00
(110P)	12672-29-6	PCB-1248 -----	ND DL=< 1.00
(111P)	11096-82-5	PCB-1260 -----	ND DL=< 1.00
(112P)	12674-11-2	PCB-1016 -----	ND DL=< 1.00
(113P)	8001-35-2	toxaphene -----	ND DL=< 2.00
		methoxychlor -----	ND DL=< 0.10
		mirex -----	ND DL=< 0.20
		PCB-1262 -----	ND DL=< 1.00
		HERBICIDES BY GC/ECD**	*****
		2,4-D -----	ND DL=< 0.06
		2,4,5-T -----	ND DL=< 0.08
		SILVEX -----	ND DL=< 0.08
94-75-7			
93-76-5			

000009

ND DL= NOT DETECTED

7/29

HOUSTON LABORATORY

PRIORITY POLLUTANTS METALS

SAM. # 7TFAKC1201 RECEIVED 6/29/87

SOURCE: GRANT ROAD REPORTED 7/29/87

SAMP. TYPE SOIL ANALYST M. COLE/R. CLARK

PARAMETER	CONC	UNITS	DETECTION LIMITS < OR =
AS	2.00	MG/KG	0.53
SE	ND < =	2.67	2.67
TL	ND < =	0.53	0.53
HG	ND < =	1.05	1.05
SB	ND < =	12.8	12.8
BE	ND < =	1.1	1.1
CD	ND < =	1.1	1.1
CR	10.5	MG/KG	2.1
CU	2.6	MG/KG	2.1
PB	11.1	MG/KG	6.4
NI	3.2	MG/KG	2.1
AG	ND < =	2.1	2.1
ZN	35.1	MG/KG	2.1

ANALYSIS CALCULATED ON A DRY WEIGHT BASIS

INORGANICS

Cn < 0.05 MG/KG *

* Some interfering material in sample which caused distillate to be cloudy.
 Value may not be reliable.

000010

8/29

Date: 07/30/87

Appendix 2

ENVIRONMENTAL PROTECTION AGENCY
ENVIRONMENTAL SERVICE DIVISION
HOUSTON LABORATORY SECTION

LAB SAMPLE REPORT

Activity Number: 7TFAKC12 Date Recvd: 06/30/87 Date Collected: 06/29/87
Sample Number: 2 Time Recvd: 08:00 Time Collected: 11:30

Source: GRANT RD Tag Number:

Site Description: Sta#02 Sta 02 site sketch

Sample Type: SOIL

Sample Retention:

Param- Organic: ABN PCB PES VOA

Metals: MET

Inorganic: CN

Biology:

Due Date: 07/28/87

Date Projected: 07/28/87

Date Completed: 07/20/87

Comment:

Your Initials: LC

000011

9/21

ORGANIC ANALYSIS DATA

6ED-HL SAMPLE NO.: 7TFAKC12-02

DATE REPORTED: 7/27/07

SAMPLE TYPE: SOIL

ANALYST: MARVELYN HUMPHREY

HPLC ACID BASE/NEUTRAL COMPOUNDS BY METHOD 625

COMPOUND	ug/KG	I	COMPOUND	ug/KG
Phenol	nd dl=440		Acenaphthene	nd dl=220
bis(2-Chloroethyl) Ether ..	nd dl=220		1,2,4 Dinitrophenol	nd dl=3330
2-Chlorophenol	nd dl=440		1,4-Nitrophenol	nd dl=3330
1,3-Dichlorobenzene	nd dl=220		1Dibenzofuran	nd dl=220
1,4-Dichlorobenzene	nd dl=220		1,2,4 Dinitrotoluene	nd dl=660
Benzyl Alcohol	nd dl=440		1,2,6 Dinitrotoluene	nd dl=660
1,2-Dichlorobenzene	nd dl=220		1Diethylphthalate	nd dl=220
2-Methylphenol	nd dl=660		14-Chlorophenylphenyl Ether ..	nd dl=(660
bis(2-chloroisopropyl)Ether	nd dl=220		1Fluorene	nd dl=220
4-Methylphenol	nd dl=660		14-Nitroaniline	nd dl=440
N-Nitroso-Di-n-Propylamine	nd dl=660		1,4,6-Dinitro-2-Methyphenol ..	nd dl=110
Hexachloroethane	nd dl=220		1N-Nitrosodiphenylamine ..	nd dl=220
Nitrobenzene	nd dl=440		1,4-Bis(phenylphenyl) Ether ..	nd dl=440
Isophorone	nd dl=440		Hexachlorobenzene	nd dl=720
2-Nitrophenol	nd dl=110		1Pentediluoropnenol	nd dl=1650
2,4-Dimethylphenol	nd dl=660		1Phenylbenzene	nd dl=220
Benzoic Acid	nd dl=110		1Anthracene	nd dl=220
bis(2-Chloroethoxy)Methane	nd dl=220		1Methylbutyraphthalate	nd dl=220
2,4-Dichlorophenol	nd dl=660		1Fluoraniline	nd dl=220
1,2,4-trichlorobenzene ..	nd dl=220		1Benzidine	nd dl=220
Napthalene	nd dl=220		1Pyrene	nd dl=220
4-Chloroaniline	nd dl=440		1Butylbenzylphthalate	nd dl=440
Hexachlorobutadiene	nd dl=220		13,3'-Dichlorobenzidine ..	nd dl=1100
4-Chloro-3-Methylphenol ..	nd dl=880		1Benz(a)Anthracene	nd dl=880
2-Methylnaphthalene	nd dl=220		1bis(2-Ethylhexyl)Phthalate ..	nd dl=440
Hexachlorocyclopentadiene..	nd dl=1100		1Chrysene	nd dl=330
2,4,6-Trichlorophenol	nd dl=660		1Di-n-Octyl Phthalate	nd dl=440
2,4,5-Trichlorophenol	nd dl=660		1Benz(b)fluoranthene	nd dl=330
2-Chloronaphthalene	nd dl=220		1Benz(k)fluoranthene	nd dl=330
2-Nitroaniline	nd dl=880		1Benz(a)pyrene	nd dl=330
DimethylPhthalate	nd dl=220		1Indeno(1,2,3-cd) Pyrene ..	nd dl=330
Acenaphthylene	nd dl=220		1Dibenzo(s,h)Anthracene ..	nd dl=330
3-Nitroaniline	nd dl=660		1Benz(g,h,i)Periene	nd dl=330

000012

10/29

ORGANIC ANALYSIS DATA

6ES-HL SAMPLE NO.: 7TFAKC12-02

DATE REPORTED: 7/29/87

SAMPLE TYPE: SOIL

ANALYST: MARVELYN HUMPHREY

TENTATIVE COMPOUNDS BY METHODS 624 AND 625

TEST.	CONC. SCAN#1 CAS # 1 (ug/KG)	COMPOUND NAME
-------	---------------------------------	---------------

NO SEMI-VOLATILE COMPOUNDS FOUND.		
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1	1	1
---	---	---

1	1	1
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1	1	1
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11/29

* ANALYSIS NULL - THE COMPOUNDS LISTED WERE IDENTIFIED BY THE MATCH WITH THE NBS/LIBRARY MASS SPECTRAL DATA FILE. NO STANDARDS WERE AVAILABLE FOR CONCENTRATION DETERMINATION. THE ESTIMATED CONCENTRATION IS BASED ON A KINETIC RATE COMPUTATION.

ORGANIC ANALYSIS

BLW-HL SAMPLE NO.: 2TFAKC1602

DATE REPORTED: 12/29/2013

SAMPLE TYPE: GULF

ANALYST: R.A. MORILLO

VOLATILE COMPOUNDS BY METHOD 8010

ITEM	NAME	RESULTS	
		PPM	PPM
(219)	67-64-1	acetone	ND DL = 2.0
(220)	107-02-0	acrylic acid	ND DL = 2.0
(39)	117-13-1	acrylonitrile	ND DL = 1.0
(40)	71-43-2	benzene	ND DL = 2.0
	76-93-3	2-butanone	ND DL = 2.0
	175-15-3	carbon disulfide	ND DL = 2.0
(60)	56-23-5	carbon tetrachloride	ND DL = 2.0
(70)	108-96-7	chlorobenzene	ND DL = 2.0
(100)	107-06-2	1,2-dichloroethane	ND DL = 2.0
(110)	71-55-6	1,1,1-trichloroethane	ND DL = 2.0
(130)	25-34-3	1,1-dichloroethane	ND DL = 2.0
(140)	79-60-5	1,1,2-trichloroethane	ND DL = 2.0
(150)	77-34-3	1,1,2,2-tetrachloroethane	ND DL = 2.0
(160)	75-02-3	1,1,1,2-tetrachloroethane	ND DL = 2.0
(230)	67-66-3	1,1,1,2-tetrachloroethane	ND DL = 2.0
(270)	72-35-2	1,2-dibromoethane	ND DL = 2.0
(340)	150-69-0	2-chloro-1,1-dichloroethane	ND DL = 2.0
(350)	76-07-3	1,1-dichloro-1,2-dibromoethane	ND DL = 2.0
(360)	1006-91-6	1,1-dichloro-1,2-dibromoethane	ND DL = 2.0
	1006-90-5	1,1-dichloro-1,2-dibromoethane	ND DL = 2.0
(400)	170-46-5	1,1,2-trichloro-1,2-dibromoethane	ND DL = 2.0
	501-93-6	1,1,1,2-tetrachloro-1,2-dibromoethane	ND DL = 2.0
	1011-11-5	1,1,1,2-tetrachloro-1,2-dibromoethane	ND DL = 2.0
(440)	73-57-2	4-chloro-1,1,1,2-tetrachloro-1,2-dibromoethane	ND DL = 2.0
(450)	74-67-3	1,1,1,2-tetrachloro-1,2-dibromoethane	ND DL = 2.0
(460)	74-05-5	1,1,1,2-tetrachloro-1,2-dibromoethane	ND DL = 2.0
(470)	75-25-2	1,1,1,2-tetrachloro-1,2-dibromoethane	ND DL = 2.0
(480)	75-27-4	1,1,1,2-tetrachloro-1,2-dibromoethane	ND DL = 2.0
(510)	1014-33-1	1,1,1,2-tetrachloro-1,2-dibromoethane	ND DL = 2.0
	106-42-3	1,1,1,2-tetrachloro-1,2-dibromoethane	ND DL = 2.0
(520)	127-41-3	1,1,1,2-tetrachloro-1,2-dibromoethane	ND DL = 2.0
(530)	106-18-5	1,1,1,2-tetrachloro-1,2-dibromoethane	ND DL = 2.0
(540)	77-13-3	1,1,1,2-tetrachloro-1,2-dibromoethane	ND DL = 2.0
	106-05-3	1,1,1,2-tetrachloro-1,2-dibromoethane	ND DL = 2.0
(550)	106-04-3	1,1,1,2-tetrachloro-1,2-dibromoethane	ND DL = 2.0
	106-05-3	1,1,1,2-tetrachloro-1,2-dibromoethane	ND DL = 2.0
	77-17-6	1,1,1,2-tetrachloro-1,2-dibromoethane	ND DL = 2.0
	106-42-3	1,1,1,2-tetrachloro-1,2-dibromoethane	ND DL = 2.0
	106-47-0	1,1,1,2-tetrachloro-1,2-dibromoethane	ND DL = 2.0

000014

12/29

ORGANO ANALYST LOG DATA

SES-HL SAMPLE NO.: TFAK01262

DATE TESTED: 10/13/03

SAMPLE TYPE: OIL

ANALYST: R.A. MCMLLIN

TENTATIVE COMPOUNDS BY METHOD - GC

TEST CONC:

SCANNED CAS #: (Cug/Kg) | COMPOUND NAME

| No VUA TIC's detected.

000015

13/29

PESTICIDE/PCB ANALYSIS

685-HL SAMPLE NO.: 7TFAKC1202

DATE REPORTED: 7/29/97

SAMPLE TYPE: SOIL

ANALYST: L.C.MINER, JR., CHEMIST

PP#	CAS#		UG/G (PPM)
(89P)	309-00-2	aldrin	ND DL=< 3.00
(90P)	56-57-1	deiudrin	ND DL=< 6.00
(91P)	57-74-9	chlorodane	ND DL=< 0.20
(92P)	50-29-3	4,4'-DDT	ND DL=< 0.60
(93P)	72-55-9	4,4'-DDL	ND DL=< 0.08
(94P)	72-54-8	4,4'-DDD	ND DL=< 0.08
(95P)	115-29-7	amendosulfan	ND DL=< 0.04
(96P)	115-29-7	b-endosulfan	ND DL=< 0.04
(97P)	1031-07-8	encosulfan sulfate	ND DL=< 0.10
(98P)	72-20-3	enocrin	ND DL=< 0.60
(99P)	7421-93-4	enocrin aldehyde	ND DL=< 0.00
(100P)	76-44-8	heptachlor	ND DL=< 0.64
(101P)	1024-57-3	heptachlor epoxide	ND DL=< 0.04
(102P)	319-84-6	a-BHC	ND DL=< 0.08
(103P)	319-85-7	b-BHC	ND DL=< 0.04
(104P)	319-86-8	c-BHC	ND DL=< 0.08
(105P)	58-89-9	g-BHC (lindane)	ND DL=< 0.64
(106P)	53469-21-9	PCB-1242	ND DL=< 1.00
(107P)	11097-69-1	PCB-1254	ND DL=< 1.00
(108P)	11104-28-2	PCB-1221	ND DL=< 1.00
(109P)	11141-16-5	PCB-1232	ND DL=< 1.00
(110P)	12672-27-6	PCB-1240	ND DL=< 1.00
(111P)	11096-82-5	PCB-1260	ND DL=< 1.00
(112P)	12674-11-2	PCB-1016	ND DL=< 1.00
(113P)	8001-35-2	toxaphene	ND DL=< 2.00
		methoxychlor	ND DL=< 0.10
		Mirex	ND DL=< 0.20
		PCB-1262	ND DL=< 1.00
		ILRBIIDES BY GC/IC**	
	94-75-7	2,4-D	ND DL=< 0.00
	93-76-6	2,4,5-T	ND DL=< 0.00
		SILVEX	ND DL=< 0.00

000016

ND DL=< 0.01 DETERMINED

14/29

PAGE

7 OF 2

APPENDIX

2

TABLE FROM BARTHOLOMEW

PERIODIC TABLE OF ELEMENTS

NAME: ERICKSON

LAST NAME

STOCK #

ELEMENT: ANGEL WING

PERIOD

12345678

ANALYST: ERICKSON

TEST NUMBER: 12345678

TEST NUMBER

TEST NUMBER

TEST	TEST NUMBER		TEST NUMBER
	TEST	TEST	
1	12345678	12345678	12345678
2	12345678	12345678	12345678
3	12345678	12345678	12345678
4	12345678	12345678	12345678
5	12345678	12345678	12345678
6	12345678	12345678	12345678
7	12345678	12345678	12345678
8	12345678	12345678	12345678
9	12345678	12345678	12345678
10	12345678	12345678	12345678
11	12345678	12345678	12345678
12	12345678	12345678	12345678
13	12345678	12345678	12345678
14	12345678	12345678	12345678

LABEL: ERICKSON TEST 12345678-12345678

INORGANICS

Cn

0.13 Mg/Kg

000017

15/29

Date: 07/30/87

167

Appendix 3

ENVIRONMENTAL PROTECTION AGENCY
ENVIRONMENTAL SERVICE DIVISION
HOUSTON LABORATORY SECTION

LAB SAMPLE REPORT

Activity Number: 7TFAKC12 Date Recvd: 06/30/87 Date Collected: 06/29/87
Sample Number: 3 Time Recvd: 08:00 Time Collected: 11:15

Source: GRANT RD Tag Number:

Site Description: Sta#03 Sta 03 site sketch

Sample Type: SOIL

Sample Retention:

Param- Organic: ABN PCB PES VOA

Metals: MET

Inorganic: CN

Biology:

Due Date: 07/28/87

Date Projected: 07/28/87

Date Completed: 07/30/87

Comment:

Your Initials: LC

000018

16/29

ORGANIC ANALYSIS DATA

6ES-HL SAMPLE NO.: 7TFAKC12-03

DATE REPORTED: 7/29/87

SAMPLE TYPE: SOIL

ANALYST: MARVELYN HUMPHREY

HSL ACID BASE/NEUTRAL COMPOUNDS BY METHOD 625

COMPOUND	ug/KG	COMPOUND	ug/KG
Phenol	nd dl=440	Acenaphthene	nd dl=220
bis(2-Chloroethyl) Ether ..	nd dl=220	1,2,4-Dinitrophenol	nd dl=3360
2-Chlorophenol	nd dl=440	1,4-Nitrophenol	nd dl=880
1,3-Dichlorobenzene	nd dl=220	1Dibenzo-furan	nd dl=220
1,4-Dichlorobenzene	nd dl=220	12,4-Dinitrotoluene	nd dl=660
Benzyl Alcohol	nd dl=440	12,6-Dinitrotoluene	nd dl=660
1,2-Dichlorobenzene	nd dl=220	Diethylphthalate	nd dl=220
2-Methylphenol	nd dl=660	14-Chlorophenylphenyl Ether ..	nd dl=660
bis(2-Chloroisopropyl)Ether	nd dl=220	Fluorene	nd dl=220
4-Methylphenol	nd dl=660	4-Nitroaniline	nd dl=220
N-Nitroso-Di-n-Propylamine	nd dl=660	1,4,6-Dinitro-2-Methylphenol	nd dl=220
Hexachloroethane	nd dl=220	N-Nitroso-diphenylamine	nd dl=220
Nitrobenzene	nd dl=220	4-Bromoanisylphenyl Ether ..	nd dl=220
Isophorone	nd dl=220	Hexachlorobenzene	nd dl=220
2-Nitrophenol	nd dl=1100	Pentachlorophenol	nd dl=1650
2,4-Dimethylphenol	nd dl=660	Phenanthrene	nd dl=220
Benzoic Acid	nd dl=1100	Anthracene	nd dl=220
bis(2-Chloroethoxy)Methane	nd dl=220	1Di-n-Butylphthalate	nd dl=770
2,4-Dichlorophenol	nd dl=660	Fluoranthene	nd dl=220
1,2,4-trichlorobenzene	nd dl=220	Benzodine	nd dl=220
Naphthalene	nd dl=220	Pyrene	nd dl=220
4-Chloroaniline	nd dl=440	Butylbenzylphthalate	nd dl=220
Hexachlorobutadiene	nd dl=220	3,3'-Bichlorobenzidine	nd dl=220
4-Chloro-3-Methyphenol	nd dl=660	Benzo(a)Anthracene	nd dl=220
2-Methylnaphthalene	nd dl=220	bis(2-Ethylhexyl)Phthalate	nd dl=440
Hexachlorocyclopentadiene..	nd dl=1100	Chrysene	nd dl=220
2,4,6-Trichlorophenol	nd dl=660	1Di-n-Octyl Phthalate	nd dl=440
2,4,5-Trichlorophenol	nd dl=660	Benzo(b)Fluoranthene	nd dl=220
2-Chloronaphthalene	nd dl=220	Benzo(k)Fluoranthene	nd dl=220
2-Nitroaniline	nd dl=880	Benzo(a)Pyrene	nd dl=880
DimethylPhthalate	nd dl=220	Indeno(1,2,3-cd) Pyrene	nd dl=880
Acenaphthylene	nd dl=220	Dibenzo(a,h)Anthracene	nd dl=880
3-Nitroaniline	nd dl=880	Benzo(g,h,i)Perylene	nd dl=880

000019

17/29

RECEIVED

ORGANIC ANALYSIS DATA

SOLVENT SAMPLE NO.: 271 AK0124B

DATE RECEIVED: 1/12/81

SAMPLE TYPE: SOIL

ANALYST: R.A. MCMLLIN

VOLATILE COMPOUNDS BY GLC AND GC/MS

RT ^a	CAS#	NAME	CONC ^b
	67-64-1	acetone	ND ppm
(20)	107-02-0	acrolein	ND ppm
(30)	107-13-1	acrylonitrile	ND ppm
(40)	71-43-2	benzene	ND ppm
	78-93-3	2-butanone	ND ppm
	126-15-0	carbon disulfide	ND ppm
(60)	56-25-0	carbon tetrachloride	ND ppm
(70)	108-99-2	chlorobenzene	ND ppm
(100)	137-96-2	1,2-dichloroethane	ND ppm
(110)	71-05-6	1,1,1-trichloroethane	ND ppm
(130)	75-24-3	1,1-dichloroethane	ND ppm
(140)	79-00-5	1,1,2-trichloroethane	ND ppm
(150)	79-34-3	1,1,1,2-tetrachloroethane	ND ppm
(160)	75-00-3	chloromethane	ND ppm
(230)	67-66-3	chloroform	ND ppm
(290)	75-35-4	1,1-dimethylbenzene	ND ppm
(300)	126-61-3	trans-2-methylcyclohexene	ND ppm
(320)	78-47-5	1,2-dimethylcyclopentane	ND ppm
(330)	100-01-02-6	trans-2-methylcyclohexane	ND ppm
	5061-61-5	1,1,1-trimethylcyclopropane	ND ppm
(400)	108-93-4	1,1,1-trimethylcyclobutane	ND ppm
	517-18-0	1,1,1-trimethylcyclopentane	ND ppm
	118-90-1	4-methyl-1-pentene	ND ppm
(440)	77-09-2	hexafluoropropane	ND ppm
(450)	54-17-3	heptane	ND ppm
(460)	74-102-2	hexanaphthalene	ND ppm
(470)	75-13-2	hexane	ND ppm
(480)	75-27-4	hexanaphthalene	ND ppm
(510)	124-413-3	heptanaphthalene	ND ppm
	100-46-2	heptane	ND ppm
(530)	124-46-4	heptanaphthalene	ND ppm
(540)	100-41-1	heptane	ND ppm
	77-14-0	heptane	ND ppm
	100-42-0	heptane	ND ppm
	100-43-0	heptane	ND ppm
	100-44-0	heptane	ND ppm
	100-45-0	heptane	ND ppm

000021

19/29

665-000 SAMPLE NO.: 97FAN00203

ANALYST: (L.A.)

DATE: SEPTEMBER 17, 1987

SAMPLE TYPE: SOIL

ANALYST: R.A. MCMLLIN

- TENTATIVE COMPOUND LIST BY NUMBER AND

TEST CONC:

SCAN-SAS #: 1 (ug/Kg) : COMPOUND NAME

| | No VOA TIC's detected.

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20/29

ESTICIDE/PCB ANALYSIS

6654-HL SAMPLE NO.: 7TFAKC1203

DATE REPORTED: 7/29/87

SAMPLE TYPE: SOIL

ANALYST: L.C.MINER,JR., CHEMIST

PP#	CAS#		UG/G (PPM)
(89P)	309-00-2	aiddrin -----	ND DL=< 0.04
(90P)	60-57-1	deiiddrin -----	ND DL=< 0.08
(91P)	57-74-9	chlorodane -----	ND DL=< 0.20
(92P)	50-29-3	4,4'-DDT -----	ND DL=< 0.08
(93P)	72-55-9	4,4'-DDE -----	ND DL=< 0.08
(94P)	72-54-8	4,4'-DDD -----	ND DL=< 0.08
(95P)	115-29-7	a-endosulfan -----	ND DL=< 0.04
(96P)	115-27-7	b-endosulfan -----	ND DL=< 0.04
(97P)	1031-07-8	endosulfan sulfate -----	ND DL=< 0.08
(98P)	72-20-8	endrin -----	ND DL=< 0.08
(99P)	7421-93-4	enarin aldehyde -----	ND DL=< 0.08
(100P)	76-44-8	heptachlor -----	ND DL=< 0.04
(101P)	1024-57-3	heptachlor epoxide -----	ND DL=< 0.04
(102P)	319-84-6	a-DHC -----	ND DL=< 0.04
(103P)	319-85-7	b-DHC -----	ND DL=< 0.04
(104P)	319-86-8	d-DHC -----	ND DL=< 0.08
(105P)	58-89-9	g-HxC (lindane)	ND DL=< 0.10
(106P)	53469-21-2	PCB-1242 -----	ND DL=< 1.00
(107P)	11097-69-1	PCB-1254 -----	ND DL=< 1.00
(108P)	11104-28-2	PCB-1221 -----	ND DL=< 1.00
(109P)	11141-16-5	PCB-1232 -----	ND DL=< 1.00
(110P)	12672-29-6	PCB-1240 -----	ND DL=< 1.00
(111P)	11096-82-5	PCB-1260 -----	ND DL=< 1.00
(112P)	12674-11-2	PCB-1016 -----	ND DL=< 1.00
(113P)	8001-35-2	toxaphene -----	ND DL=< 2.00
		methoxychlor -----	ND DL=< 0.10
		mirex -----	ND DL=< 0.20
		PCB-1262 -----	ND DL=< 1.00
		*****HERBICIDES BY GC/LC*****	
		2,4-D -----	ND DL=< 0.08
		2,4,5-T -----	ND DL=< 0.08
		SILVEX -----	ND DL=< 0.08
94-75-7			
93-76-5			

000023

ND DL = NOT DETECTED

21/29

77
PAGE

ATTACHMENT

3

HIBRITION LABORATORY

PRIORITY EXAMINATIONS REPORT

SAMPLE NUMBER: 77-2801203

RECEIVED

10/29/77

COLLECTOR: GRANT ROAD

REPORTER:

GRANT

SAMPLE TYPE: SOIL

ANALYST: M. GOLDBECK, JR.

TEST NUMBER:

CLAYE - 1001A

TEST DATE:

10/29/77

TEST TIME:

ANALYST	TEST NUMBER	TEST DATE	TEST TIME
M. GOLDBECK, JR.	CLAYE - 1001A	10/29/77	10:15
M. GOLDBECK, JR.	CLAYE - 1001B	10/29/77	10:15
M. GOLDBECK, JR.	CLAYE - 1001C	10/29/77	10:15
M. GOLDBECK, JR.	CLAYE - 1001D	10/29/77	10:15
M. GOLDBECK, JR.	CLAYE - 1001E	10/29/77	10:15
M. GOLDBECK, JR.	CLAYE - 1001F	10/29/77	10:15
M. GOLDBECK, JR.	CLAYE - 1001G	10/29/77	10:15
M. GOLDBECK, JR.	CLAYE - 1001H	10/29/77	10:15
M. GOLDBECK, JR.	CLAYE - 1001I	10/29/77	10:15
M. GOLDBECK, JR.	CLAYE - 1001J	10/29/77	10:15
M. GOLDBECK, JR.	CLAYE - 1001K	10/29/77	10:15
M. GOLDBECK, JR.	CLAYE - 1001L	10/29/77	10:15
M. GOLDBECK, JR.	CLAYE - 1001M	10/29/77	10:15
M. GOLDBECK, JR.	CLAYE - 1001N	10/29/77	10:15
M. GOLDBECK, JR.	CLAYE - 1001O	10/29/77	10:15
M. GOLDBECK, JR.	CLAYE - 1001P	10/29/77	10:15
M. GOLDBECK, JR.	CLAYE - 1001Q	10/29/77	10:15
M. GOLDBECK, JR.	CLAYE - 1001R	10/29/77	10:15
M. GOLDBECK, JR.	CLAYE - 1001S	10/29/77	10:15
M. GOLDBECK, JR.	CLAYE - 1001T	10/29/77	10:15
M. GOLDBECK, JR.	CLAYE - 1001U	10/29/77	10:15
M. GOLDBECK, JR.	CLAYE - 1001V	10/29/77	10:15
M. GOLDBECK, JR.	CLAYE - 1001W	10/29/77	10:15
M. GOLDBECK, JR.	CLAYE - 1001X	10/29/77	10:15
M. GOLDBECK, JR.	CLAYE - 1001Y	10/29/77	10:15
M. GOLDBECK, JR.	CLAYE - 1001Z	10/29/77	10:15

ANALYTICAL LABORATORY TEST REPORT NUMBER: 1001

Inorganics

Cn

< 0.51 Mg/Kg

000024

22/29

Date: 07/30/87

Appendix 4

ENVIRONMENTAL PROTECTION AGENCY
ENVIRONMENTAL SERVICE DIVISION
HOUSTON LABORATORY SECTION

LAB SAMPLE REPORT

Activity Number: 7TFAKC12 Date Recvd: 06/30/87 Date Collected: 06/29/87
Sample Number: 4 Time Recvd: 08:00 Time Collected: 11:30

Source: GRANT RD Tag Number:
Site Description: Sta#04 Sta 04 site sketch
Sample Type: SOIL
Sample Retention:

Param- Organic: ABN PCB PES VOA
Metals: MET
Inorganic: CN
Biology:

Due Date: 07/28/87
Date Projected: 07/28/87
Date Completed: 07/30/87
Comment:
Your Initials: LC

000025

23/29

ORGANIC ANALYSIS DATA

GEOMIL SAMPLE NO.: 7TFAKC12-04

DATE REPORTED: 7/29/87

SAMPLE TYPE: SOIL

ANALYST: MARVELYN HUMPHREY

HSL ACID BASE/NEUTRAL COMPOUNDS BY METHOD 625

COMPOUND	ug/kg		COMPOUND	ug/kg
Phenol	nd	d1=430	Acenaphthene	nd d1=240
bis(2-Chloroethyl) Ether ..	nd	d1=240	12,4-Dinitrophenol	nd d1=3600
2-Chlorophenol	nd	d1=430	14-Nitrophenol	nd d1=960
1,3-Dichlorobenzene	nd	d1=240	Dibenzofuran	nd d3=240
1,4-Dichlorobenzene	nd	d1=240	12,4-Dinitrotoluene	nd d1=720
Benzyl Alcohol	nd	d1=430	12,6-Dinitrotoluene	nd d3=720
1,2-Dichlorobenzene	nd	d1=240	Diethylphthalate	nd d1=240
2-Methylphenol	nd	d1=720	14-Chlorophenylphenyl Ether ..	nd d1=720
bis(2-chloroisopropyl)Ether ..	nd	d1=740	Fluorene	nd d1=720
4-Methylphenol	nd	d1=720	4-Nitroaniline	nd d1=720
N-Nitrosodimethylamine ..	nd	d1=720	4,6-Dinitro-2-Methylphenol ..	nd d1=480
Hexachloroethane	nd	d1=240	2-Nitrobenzophenone	nd d1=430
Nitrobenzene	nd	d1=240	14-Bromophenylphenyl Ether ..	nd d1=720
Isophorone	nd	d3=430	Hexachlorobenzene	nd d1=240
2-Nitrophenol	nd	d1=1200	Pentachlorophenol	nd d1=1300
2,4-Dimethylphenol	nd	d1=720	Phenanthrene	nd d1=720
Benzoic Acid	nd	d1=1200	Anthracene	nd d1=240
bis(2-Chloroethoxy)Methane ..	nd	d1=240	1-Di-n-Butylphthalate	nd d1=720
2,4-Dichlorophenol	nd	d1=720	Fluoranthene	nd d1=720
1,2,4-trichlorobenzene ..	nd	d1=240	Benzidine	nd d1=740
Naphthalene	nd	d1=240	Pyrene	nd d1=720
4-Chloroaniline	nd	d1=430	nButylBenzylphthalate	nd d1=600
Hexachlorobutadiene	nd	d1=740	13,5'-Dichlorobenzidine ..	nd d1=1200
4-Chloro-3-Methylphenol ..	nd	d1=720	Benz(a)Anthracene	nd d1=720
2-Methylnaphthalene	nd	d1=240	10,12-(P,p')Biphenylphthalate ..	nd d1=430
Hexachlorocyclopentadiene ..	nd	d1=1200	Chrysene	nd d1=720
2,4,6-Trichlorophenol	nd	d1=720	Di-n-Octyl Phthalate	nd d1=720
2,4,5-Trichlorophenol	nd	d1=720	Benz(e)Fluoranthene	nd d1=720
2-Chloronaphthalene	nd	d1=240	Benz(a)Fluorene	nd d1=720
2-Nitroaniline	nd	d1=720	Indeno(1,2,3-d) Pyrene	nd d1=720
Diethylphthalate	nd	d1=720	1,3-Di-(n-butyl)benzene ..	nd d1=720
Acenaphthylene	nd	d1=720	2,6,7-Tri-n-propylbenzene ..	nd d1=720
3-Nitroaniline	nd	d1=720		

000026

24/29

SAMPLE TYPE: SOLN

ANALYST: K. A. MCMILLIN

PMT: INSTRUMENT TESTED

VOLATILE COMPOUNDS BY GLC (ppm)

PPM	CAS#		VOL %
	67-64-1	acetone	0.0 1.0 = 0.6
(2d)	102-02-5	acrylic acid	0.2 0.2 = 0.4
(3d)	102-13-1	acrylonitrile	0.2 0.1 = 0.3
(4d)	71-43-2	benzene	0.0 1.0 = 1.0
	73-23-3	2-butanone	0.0 0.1 = 0.1
	173-15-0	carbon disulfide	0.0 0.2 = 0.1
(5d)	55-33-0	carbon tetrachloride	0.0 0.1 = 0.1
(7d)	108-90-9	cyclohexene	0.0 0.1 = 0.1
(12d)	137-97-1	1,2-dichloroethane	0.0 0.1 = 0.1
(13d)	71-50-6	1,3-dichloropropane	0.0 0.1 = 0.1
(14d)	70-54-6	1,4-dichlorobutane	0.0 0.1 = 0.1
(14d)	17-03-3	1,4-dichlorobutene	0.0 0.1 = 0.1
(15d)	67-75-9	1,4-dichloro-1-butene	0.0 0.1 = 0.1
(15d)	136-20-7	1,3-dichloro-2-butene	0.0 0.1 = 0.1
(17d)	73-40-6	1,4-dichloro-2-butene	0.0 0.1 = 0.1
	1000	1,4-dichloro-2-butene	0.0 0.1 = 0.1
(2d)	102-02-5	1,4-dichloro-2-butene	0.0 0.1 = 0.1
	519-16-1	1,4-dichloro-2-butene	0.0 0.1 = 0.1
	130-10-7	1,4-dichloro-2-butene	0.0 0.1 = 0.1
(4d)	75-97-0	1,3-dichloro-1-propanol	0.0 0.1 = 0.1
(4d)	78-17-7	1,2-dichloro-1-propanol	0.0 0.1 = 0.1
(4d)	74-13-3	1,2-dichloroethane	0.0 0.1 = 0.1
(4d)	73-23-3	1,3-dichloroethane	0.0 0.1 = 0.1
(4d)	71-43-2	1,4-dichloro-1-butene	0.0 0.1 = 0.1
(4d)	73-23-3	1,4-dichloro-2-butene	0.0 0.1 = 0.1
(4d)	102-02-5	1,4-dichloro-2-butene	0.0 0.1 = 0.1
	173-15-0	1,4-dichloro-2-butene	0.0 0.1 = 0.1
	136-20-7	1,4-dichloro-2-butene	0.0 0.1 = 0.1
	130-10-7	1,4-dichloro-2-butene	0.0 0.1 = 0.1
	519-16-1	1,4-dichloro-2-butene	0.0 0.1 = 0.1
	1000	1,4-dichloro-2-butene	0.0 0.1 = 0.1
	1000	1,4-dichloro-2-butene	0.0 0.1 = 0.1
	1000	1,4-dichloro-2-butene	0.0 0.1 = 0.1
	1000	1,4-dichloro-2-butene	0.0 0.1 = 0.1
	1000	1,4-dichloro-2-butene	0.0 0.1 = 0.1
	1000	1,4-dichloro-2-butene	0.0 0.1 = 0.1
	1000	1,4-dichloro-2-butene	0.0 0.1 = 0.1
	1000	1,4-dichloro-2-butene	0.0 0.1 = 0.1
	1000	1,4-dichloro-2-butene	0.0 0.1 = 0.1
	1000	1,4-dichloro-2-butene	0.0 0.1 = 0.1
	1000	1,4-dichloro-2-butene	0.0 0.1 = 0.1
	1000	1,4-dichloro-2-butene	0.0 0.1 = 0.1
	1000	1,4-dichloro-2-butene	0.0 0.1 = 0.1

000028

26/29

650-ml. SAMPLE NO.: 0178-A-17-01

TEST DATE: 10/17/78

SAMPLE TYPE: SOIL

ANALYST: R.A. MCILLIN

TENTATIVE CONCENTRATION BY V.G.C.

TEST CONC:

SCANNED-GAS #1 (ug/Kg) | COMPOUND NAME

| No VOC TIC's detected.

000029

27/29

PESTICIDE/PCB ANALYSIS

6E9-HL SAMPLE NO.: 7TFAKC1204

DATE REPORTED: 7/29/87

SAMPLE TYPE: SOIL

ANALYST: L.C.MINER, JR., CHEMIST

PP#	CAS#		UG/G (PPM)
(89P)	309-00-2	aldrin	ND DL=< 0.04
(90P)	60-57-1	dealdrin	ND DL=< 0.08
(91P)	57-74-9	chlorodane	ND DL=< 0.75
(92P)	50-29-3	4,4'-DDT	ND DL=< 0.08
(93P)	72-55-9	4,4'-DDE	ND DL=< 0.08
(94P)	72-54-8	4,4'-DDD	ND DL=< 0.08
(95P)	115-29-7	a-endosulfan	ND DL=< 0.04
(96P)	115-29-7	b-endosulfan	ND DL=< 0.04
(97P)	1031-07-8	endosulfan sulfate	ND DL=< 0.04
(98P)	72-30-8	endrin	ND DL=< 0.08
(99P)	7421-93-4	endrin aldehyde	ND DL=< 0.04
(100P)	76-44-8	heptachlor	ND DL=< 0.04
(101P)	1024-57-3	heptachlor epoxide	ND DL=< 0.04
(102P)	319-84-6	a-BHC	ND DL=< 0.04
(103P)	319-85-7	o-BHC	ND DL=< 0.04
(104P)	319-86-8	o-BHC	ND DL=< 0.00
(105P)	58-89-9	g-BHC (lindane)	ND DL=< 0.04
(106P)	53469-21-9	PCB-1242	ND DL=< 1.00
(107P)	11097-69-1	PCB-1254	ND DL=< 1.00
(108P)	11104-23-2	PCB-1221	ND DL=< 1.00
(109P)	11141-16-5	PCB-1232	ND DL=< 1.00
(110P)	12672-29-6	PCB-1248	ND DL=< 1.00
(111P)	11096-82-5	PCB-1260	ND DL=< 1.00
(112P)	12674-14-2	PCB-1016	ND DL=< 1.00
(113P)	8001-35-2	toxaphene	ND DL=< 1.00
		Methoxychlor	ND DL=< 0.04
		Mirex	ND DL=< 0.20
		PCB-1262	ND DL=< 1.00
		*INHALICIDES BY GC/LCXXXXXXXXXXXXXXXXXXXX	
		2,4-D	ND DL=< 0.00
		2,4,5-T	ND DL=< 0.00
		SILVEX	ND DL=< 0.00
	94-75-7		
	95-76-5		

000030

ND DL = ND: DETECTED

28/29

POLAROID

X X

ANALYST

4

HOUSTON LABORATORY

PRIORITY POLLUTANTS MEASURED

SAMP. # 10748C1264

RECEIVED

7/23/87

SOURCE: GRANT ROAD

RECEIVED

7/23/87

NAME: FARM SOIL

ANALYST: M. COLAVERDI APR

REF ID: 10748C1264 DATE: 7/23/87 SUBST: 100%

IDENTIFIED

LEAD

CHROM

PCP	%	PPM	PCP	%
AS	NO < =	1.18	NO/KG	-1.18
AS	NO < =	0.30	NO/KG	0.30
		0.12	NO/KG	0.12
AS	NO < =	0.17	NO/KG	0.17
AS	NO < =	1.11	NO/KG	1.11
AS	NO < =	1.10	NO/KG	1.10
AS	NO < =	1.10	NO/KG	1.10
AS	NO < =	1.10	NO/KG	1.10
AS	NO < =	0.14	NO/KG	0.14
AS	NO < =	0.12	NO/KG	0.12
AS	NO < =	0.10	NO/KG	0.10
AS	NO < =	0.10	NO/KG	0.10
AS	NO < =	0.10	NO/KG	0.10
AS	NO < =	0.10	NO/KG	0.10
AS	NO < =	0.10	NO/KG	0.10
AS	NO < =	0.10	NO/KG	0.10
		0.08	NO/KG	0.08
		0.08	NO/KG	0.08

RESULTS CALCULATED AT 100% DIRECT GRADING

Inorganics

Cn

< 0.17 Mg/Kg

000031

29/29

CASE #: FY87-1725

SITE ASSESSMENT AND SAMPLING MISSION

AT

GRANT ROAD DRUM SITE

HOUSTON, HARRIS COUNTY, TEXAS

Prepared for

EPA REGION VI

EMERGENCY RESPONSE BRANCH

J. Chris Petersen
Deputy Project Officer

By

ECOLOGY AND ENVIRONMENT, INC.

TECHNICAL ASSISTANCE TEAM

HOUSTON, TEXAS

DATE: 9/10/87

RECEIVED
SUPERFUND

APR 1 3 1992

RECORDS
CENTER

000032

ecology and environment, inc.

6440 HILLCROFT AVENUE, HOUSTON, TEXAS 77081, TEL. 713/771-9460

International Specialists in the Environment

DATE: September 10, 1987

TO: James Staves, OSC
EPA Region VI, Emergency Response Branch

THRU: J. Chris Petersen, Deputy Project Officer
EPA Region VI, Emergency Response Branch

THRU: William Goode, TAT Leader
Region VI, Technical Assistance Team - Dallas

FROM: Richard Yeager, TAT Member *RNY*
Region VI, Technical Assistance Team - Houston

SUBJECT: Site Assessment and Sampling Mission
Grant Road Site
Houston, Harris County, Texas

TDD #: T06-8706-37
PAN #: TTX 0587 SAA
CASE #: FY87-1725

On June 25, 1987, TAT members Yeager and McLaughlin investigated a report by a citizen concerning abandoned drums in the north part of Houston. The abandoned drums are located on a wooded tract of land to the east of the Warner Cable hub station at 9602 Grant Road, Harris County, Houston. The purpose of TAT's visit was to perform reconnaissance at the site and to determine if an immediate and substantial threat to the public health or the environment exists at the site. When TAT arrived on site, Warner Cable personnel were also present. Warner Cable showed TAT the location of the drums. One of the Warner Cable personnel stated that he believed the lot to the east of Warner Cable's property had once been a "fertilizer or pesticide place." Subsequently, TAT investigated the area. Approximately 50 fifty-five gallon steel drums were located to the north of an east-west barbed-wire fence. Most of the drums were upright, and some were still on pallets. Most were so badly rusted that the labels on them could not be read. Some of the drums were clearly marked "Anhydrous Aluminum Chloride." None of the drums appeared to be leaking; however, some appeared to be bulging. There was no stressed vegetation in the area around the drums. There was little evidence of human traffic around the drum area, although what appeared to be a child's "fort" was located about 300 feet to the south of the drum area. A strip mall is located approximately 200 feet to the east of the drums, and a child daycare center is located one quarter mile to the southeast. Access to the drums is not restricted. TAT left the site and reported site conditions to OSC Hammack.

On June 26, 1987, TAT member McLaughlin placed a telephone call to Jerry Spetseris, a Field Investigator for the Texas Water Commission TWC. Mr. Spetseris stated that he found about ten drums in mid-May, but did not know about the 50 drums along the barbed-wire fence. He also stated that he and a potential lessor of the property opened one of the drums labeled "Anhydrous Aluminum Chloride" and found "paint wastes." He also informed TAT that the property management firm which handles the property is Raymond R. Betz Company.

TAT member McLaughlin subsequently phoned Raymond R. Betz Company and spoke with Joanne Schnell. She stated that the property which contains the drums was purchased by a group of investors in 1982 and managed by Raymond R. Betz Company. She also stated that she had no idea what the drums contained. She was in the process of receiving bids for the removal of the drums.

On June 29, 1987, TAT members Yeager, McLaughlin and Fry travelled to the site in order to obtain soil samples from the drum area. TAT was accompanied to the site by OSC James Staves. TAT also met with TWC Field Investigator Spetseris at the site. In order to maneuver in the vicinity of the drums, Spetseris cleared brush near the drums. Spetseris also showed TAT 11 additional drums located to the north of the main group of drums. TAT dressed in Safety Level B and conducted air monitoring with the OVA. No readings above background were observed. Draeger tubes which detect hydrogen chloride were also used to determine if the gas was evolving from drums marked aluminum chloride. None was detected. TAT then downgraded to Safety Level C and obtained four soil samples from selected areas near the drums. During the investigation, TAT accurately counted the number of drums on the site. Sixty 55-gallon steel drums were counted; forty-nine were located along the east-west fence line, and eleven were scattered in the wooded area to the north. Thirteen of the drums were clearly marked as "Anhydrous Aluminum Chloride." A few drums were marked as atomized aluminum. Some of the bands which held the drums together on the pallets were still in place. After collecting the soil samples (see site sketch for sampling locations), TAT left the site. The samples were taken to the EPA Laboratory in Houston to be analyzed for priority pollutants.

Summary of Laboratory Results

Four soil grab samples were obtained in the vicinity of the drums. The samples were analyzed for priority pollutants (Hazardous Substance List metals and cyanide, ABN's, VOAs, pesticides, and herbicides.) No VOAs, pesticides, or herbicides were detected in any of the samples.

Of the four samples taken, only Sample #4 showed significantly elevated levels (greater than 3 times the western U.S. ambient background) of several metals.

<u>Sample #4</u>	<u>Conc. (mg/kg)</u>	<u>Ambient Background Western US (mg/kg)</u>
Lead	413	17
Mercury	2.86	0.046
Zinc	261.8	70

000034

3/21

Cyanide concentrations in the samples were:

<u>Sample #</u>	<u>CN (mg/kg)</u>
1	0.05 (less than detection limit)
2	0.13
3 -	0.51
4	0.17

ABN analysis in Sample #1 revealed a bis(2 ethylhexyl)phthalate concentration of 15,000 ug/kg. Sample #3 showed and estimated concentration of 4440 ug/kg of an unknown compound. Sample #4 showed the following tentatively identified concentrations: gamma-chlordane, 873 ug/kg; unknown chlorinated hydrocarbon, 590 ug/kg; unknown chlorinated hydrocarbon, 354 ug/kg; and an unknown compound, 3450 ug/kg.

Conclusions

ABN analysis is inconclusive. Bis(2 ethylhexyl)phthalate is a common laboratory contaminant. Tentatively identified concentrations of gamma-chlordane and chlorinated hydrocarbons were not confirmed in the pesticide analysis. Sample #3 showed a cyanide concentration approximately ten times the detection limit. Metal analysis showed elevated concentrations of lead, mercury, and zinc.

The elevated concentrations of lead, mercury, and zinc in the soil indicate that further investigation into the contents of the drums is warranted. The proximity of the shopping mall and unrestricted access to the site pose the possibility of human or animal contact. TAT recommends that (1) the contents of the drums be sampled and/or (2) the PRP's should be strongly urged to properly dispose of the drums. Research into the previous ownership of the site may also be helpful in determining the contents of the drums.

000035

4/21

List of Attachments: No. T06-8706-37

Trip Narrative

Topographic Map

Site Sketch

Photographs and Negatives

Logbook Copies

Phone Conversation Records

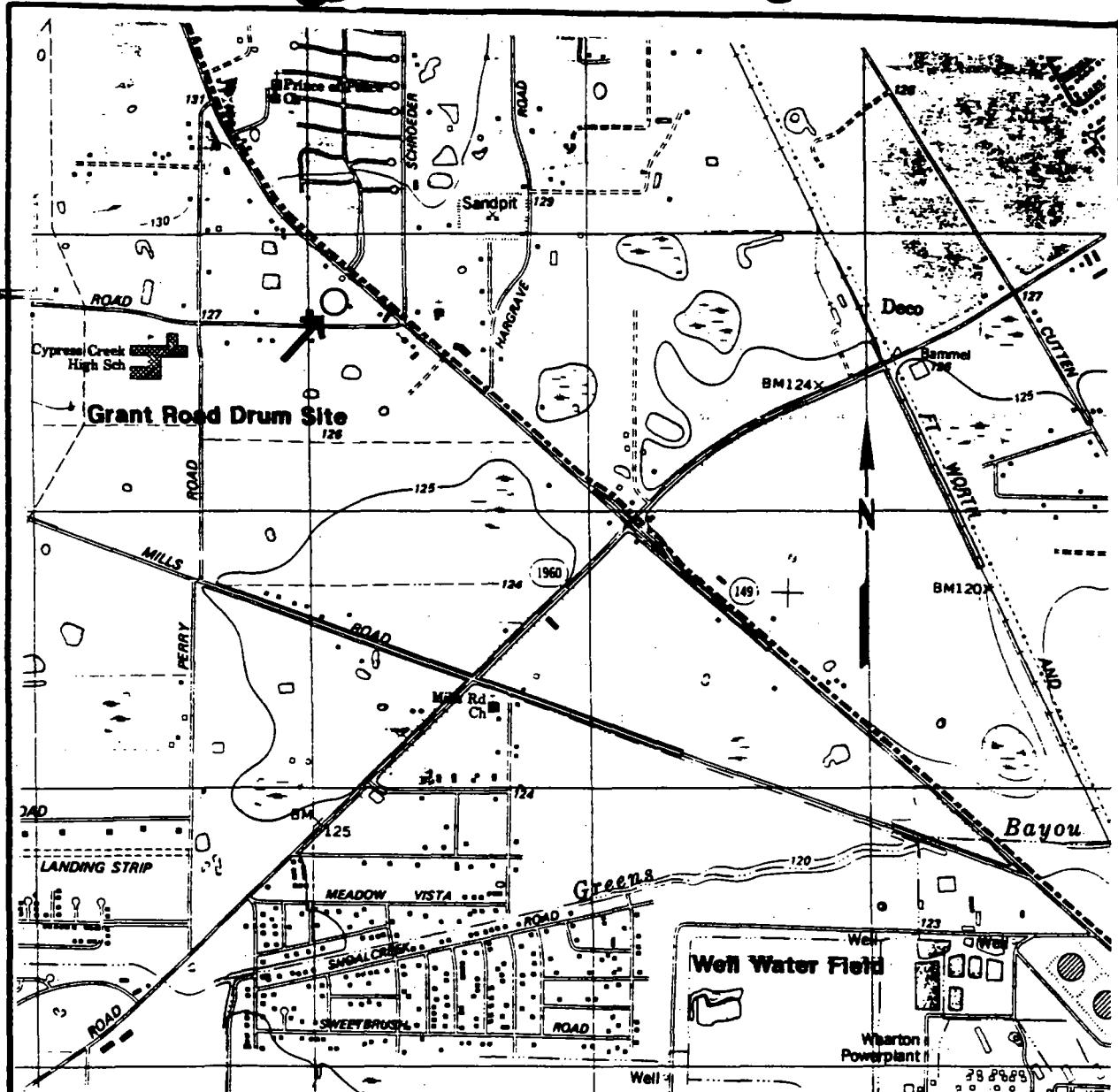
EPA Laboratory Analysis

Copy of TDD No. T06-8706-37

Copy of AOC/POR

000036

5721



**Ecology and Environment, Inc.
Technical Assistance Team
Region VI**

TX D 0 8 2 3 0 6 1 9 6

TDD No: T06-8709-17

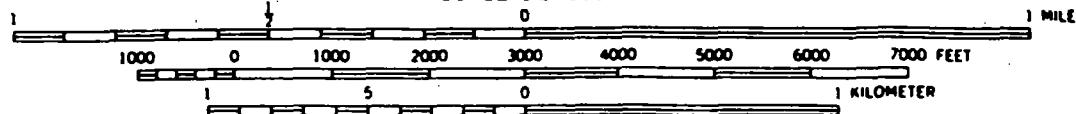
PAN : TTX0587SAC

Date : 10/23/87

Originator : Robert Marguccio

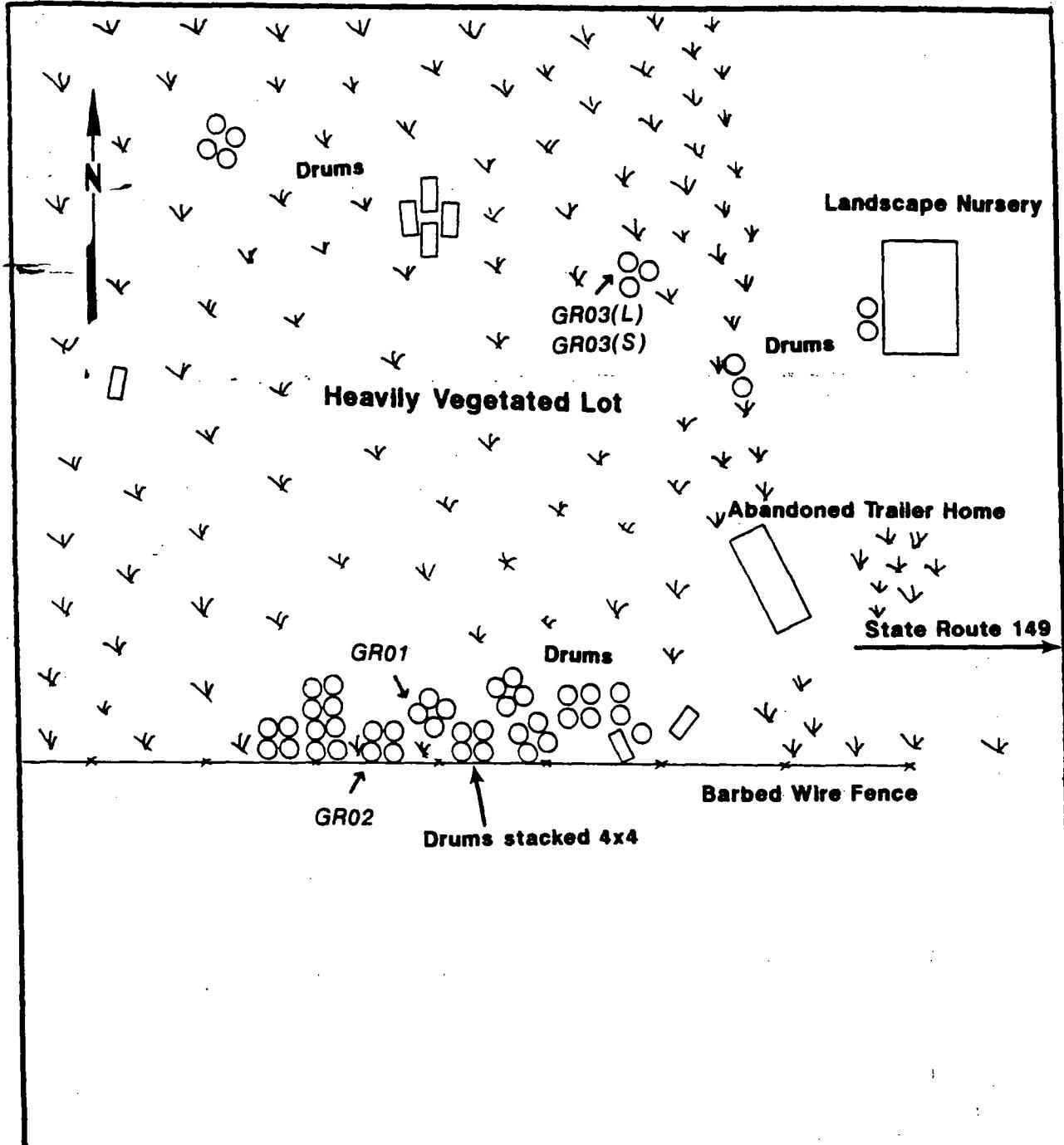
**Grant Road Drum Site
Satsuma Quadrangle
Texas-Harris Co.
7.5 Minute Series (Topographic)**

SCALE 1:24 000



000037

6/21



	Ecology and Environment, Inc.	TXD982305195	TDD No: T06-8709-17
	Technical Assistance Team	PAN : TTX0587SAC	Date : 10/23/87
	Region VI	Originator : Robert Marguccio	

Grant Road Drum Site
 Site Sketch and Sample Location Map
 Houston, Harris County, Texas
 (Not to Scale)

000038

7/21



TDD#: T06-8706-37 Pg. 2 of 4

Photographer/Witness # 4

John McLaughlin/Richard Yeager

Date/Time/Direction

6-29-87/0914 hours/West

Comments: One intact drum in puddle.

Photographer/Witness # 6

John McLaughlin/Richard Yeager

Date/Time/Direction

6-29-87/1010 hours/Southeast

Comments: Main group of drums along fence line after brush was cleared.

Photographer/Witness # 7

John McLaughlin/Richard Yeager

Date/Time/Direction

6-29-87/1010 hours/South

Comments: Main group of drums along fence line after brush was cleared.

000039

TDD#: T06-8706-37 Pg. 1 of 4

Photographer/Witness # 1

John McLaughlin/Richard Yeager

Date/Time/Direction

6-30-87/0900 hours/Northeast

Comments: Three drums in group. TWC
opened one of the drums in mid-May,
1987 and found "paint waste".

Photographer/Witness # 2

John McLaughlin/Richard Yeager

Date/Time/Direction

6-30-87/0905 hours/East

Comments: Three drums on their sides.

Photographer/Witness # 3

John McLaughlin/Richard Yeager

Date/Time/Direction

6-30-87/0909 hours/North

Comments: Four barrels among trees.

000040

ecology and environ

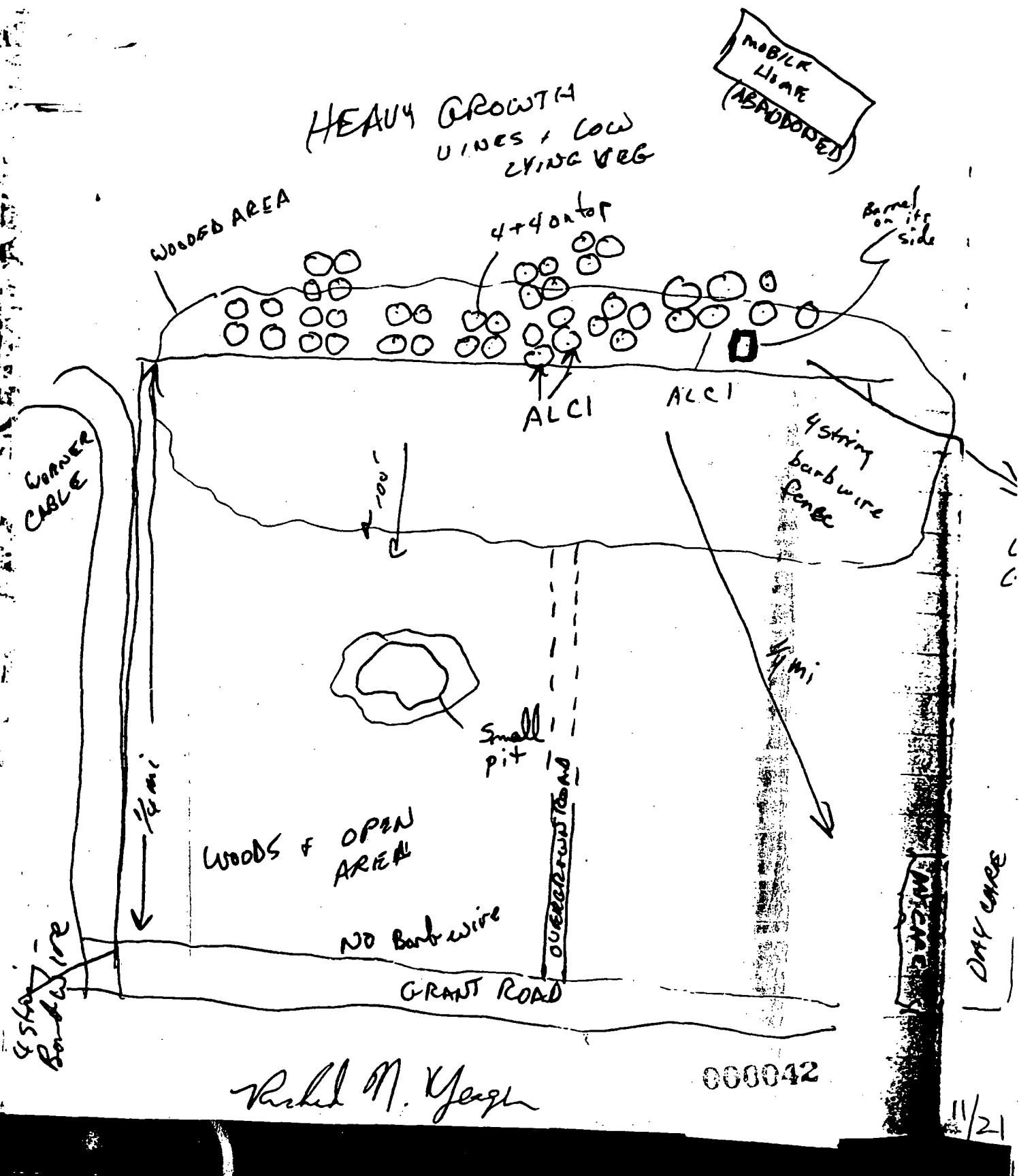
9/21

6/25/87 13:00 Drums in TV Houston - GRANT ROAD
RECEIVED CALL FROM MR HAMMACK, OSC
CONCERNING DRUMS AS IN HOUSTON
CONTACTED MR. MURDY w/ WARNER CABLE
GAVE DIRECTIONS TO LOCATION OF DRUMS
1960 - 149 LEFT ON GRANT ROAD, HOUSTON
ARRIVE ON SITE - TURN RIGHT A $\frac{1}{2}$ MILE
FROM 149. HUB STATION FOR WARNER
CABLE (ANTENNA) UNLOCKED GATE. MET
W/ 2 WARNER CABLE PERSONNEL.

*Richard M.
6/25/87 Gage*

000041

10/21



TDD#: T06-8706-37 Pg. 3 of 4

Photographer/Witness # 8

John McLaughlin/Richard Yeager

Date/Time/Direction

6-29-87/1010 hours/Southwest

Comments: Drums along fence line.

CONDITION OF DRUMS -

MOST ARE RUSTED TO THE POINT
WHERE CAN'T READ.

HAVE 3 AF CL

NONE ARE LEAKING

SOME APPEAR TO BE EXPANDED

MY COUNT 47 DRUMS

HIDDEN FROM VIEW OF GRANT ROAD

Possible evidence of KID'S FORT IN
WOODS TO SOUTH

NO STRESSED VEGETATION

200' to Garage 1620 LEFT SITE
CROSS
MALL

PNY
FENCE +

1640 CALLED VISITOR

1650 PAT HAMMACK - BRIEFED HIM ON SITUATION

PAT SAID - CALL JIM STADES IN MORNING

1830 ARRIVE BACK IN OFFICE

PHOTOS

#1 1545 N BARRELS PILED ON TOP OF EACH OTHER

#2 - #7 1546 N TO EAST PANORAMA OF BARRELS
ALONG FENCE LINE (LEFT TO RIGHT)

#8 + #9 1550 NW PANORAMA

Richard M. Haigh

000044

13/21

Day care

Barrels

RNY
S
ANY #10 1550 AT BACK SIDE (N) OF
FENCE LINE, OVERGROWN w/ BRUSH
#11 1600 PIT E 120' S OUT OF BARRELS

~~Red 100 ft C
5/25/87 Tag~~

000045

141-
12

6/29/87 Grant Road Site Sampling Mission

- RNY 07
0835 Pick up osc at IAH
0830 Drive Past Cypress Fairbanks Hospital
0845 ARRIVE ON SITE SAFETY MEETING
0900 LEVEL A - INSPECT SITE, STAY AWAY
 FROM DRUMS WEATHER: HOT HUMID, 54 WNW,
 LITTLE BREEZE. TEAM MEMBERS: YEAGER, TEAM
 LEADER, FRY SITE SAFETY, McLAUGHLIN, GAMPLER;
 also present osc JAMES STAVES + TWO JERRIE
 SPETSERIS. IN NORTHERN PART OF AREA DRUMS
 APPEARED in groups of 3, 3, 4, 1 and 1. TWO
 showed area where he popped a drum + found "paint
 wastes." Went to area of 4 drums along
 fence. A few do appear to be leaking.
0950 YEAGER + McLAUGHLIN BOUGHT CLIPPERS FROM
 84 LUMBER
1000 CREATED PATH TO DRUMS
1030 DRESS OUT IN LEVEL B. CARRY OUT TO DRUMS.
 ALSO DRESSER TAKE (HCL). NO READINGS ABOVE
 BACKGROUND.
1050 OUT OF LEVEL B. TAKE A BREAK. YEAGER
 AND MC LAUGHLIN DRESSED IN LEVEL C. BEGAN
 TAKING SOIL SAMPLES.

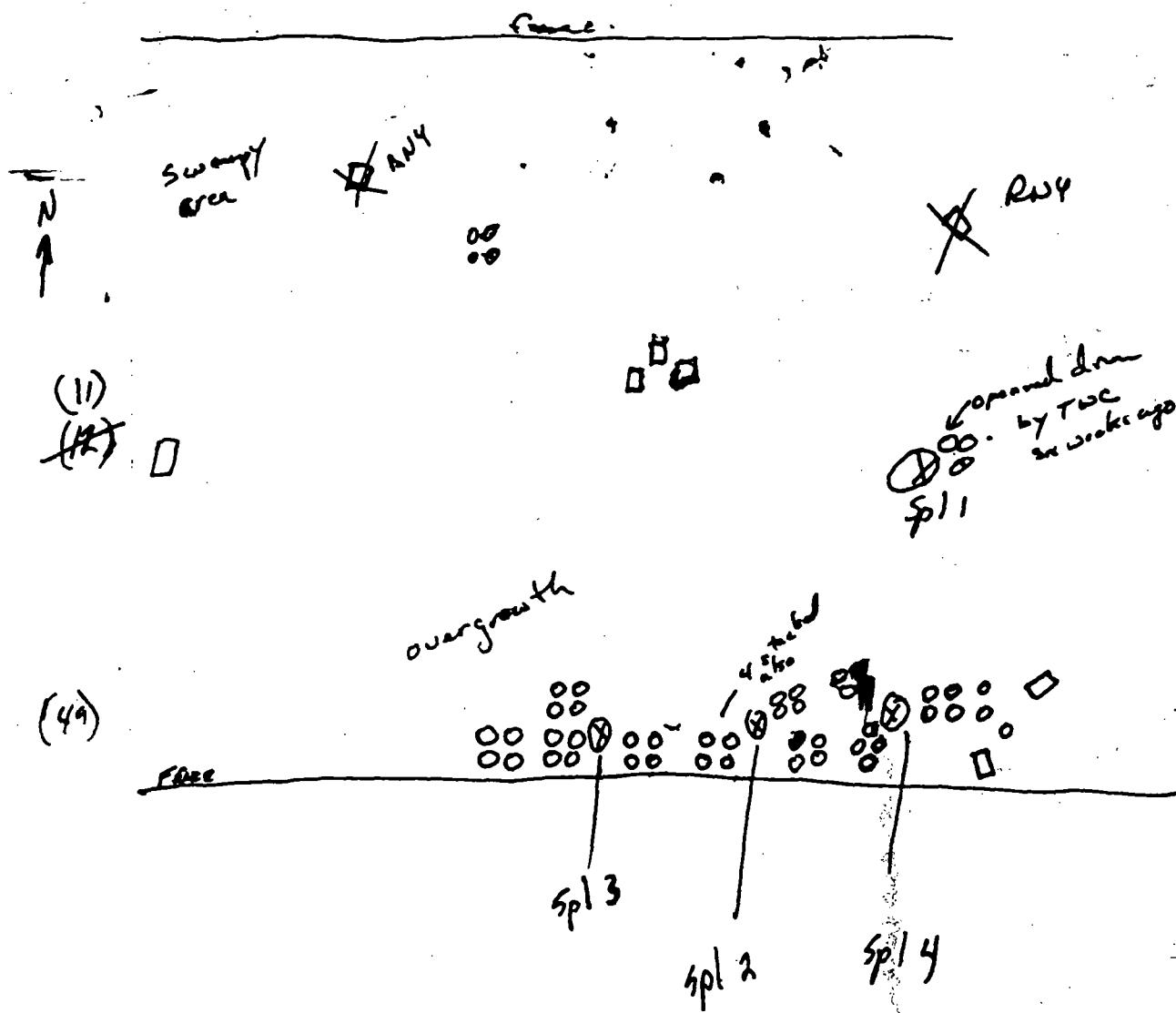
~~Rankin M. Geiger
 6/29/87~~

000046

15/21

50

Pasture



Richard M. George

6-22-82

000047

16/21

1115 Spl 1 group of 3 drums " east part of lot

1120 Spl 2 group just to north of 4 stacked
on each other "

1125 Spl 3

1130 Spl 4

1135 Begin Decoy "

1220 Chain of Custody.

1240 LEFT SITE

SITE NOTES:

- 10 are - clearly marked Al Cl₃
- A few are marked aluminum
- MOST OF DRUMS WERE STILL ON PALLETS
- BANDS WHICH HELD DRUMS TOGETHER ARE
STILL IN PLACE.

Richard M. Young
6-29-87

060048

17/21

<u>Photos :</u>	<u>Desc.</u>	<u>Direction</u>
0900 #1	3 yellow barrels marked A/C13	NE
0905 #2	4 Tipped over barrels covered by vegetation	E
0909 #3	4 barrels among trees	N
0914 #4	1. Intact Single barrel setting W in puddle	W
0915 #5	Standing water /w trash along W South fence line of property	
1010 #6	Drums along fence line after clearing	SE
1010 #7	Drums along fence line after clearing	S
1010 #8	Drums along fence line after clearing	SW
1225 #9	Drums along fence line	W
1225 #10	Drums along fence line	W

J McLaughlin

6-29-87

000049

18/21

ONE CONVERSATION RECORD

Conversation with:

Name Jerry Spetsaris

Company TWC

Address Deer Park

Phone 479-5981

Subject Grant Rd Site

Date 6/26/87

Time 12:20 hours AM/PM

Originator Placed Call

Originator Received Call

W.O. NO. _____

Notes:

Jerry called in regards to ongoing action at Grant Rd site. He elaborated on actions already taken by TWC in regards to approximately 10 or 11 barrels that owner had found scattered on their property approximately 6 weeks prior. He indicated that at one point he and a prospective lessee of the property had popped the lid on one of the barrels marked AIC3 and that he then determined it to be paint sludge and water by observation. No analysis was performed. The barrels that he had found were clustered throughout the property in groups of 4, 3, 3 and 1. He also indicated that he had gone out and walked the property looking for the 40+ barrels that TAT investigated on 6-25-86. Jerry informed me that the property management firm that handled the property was Raymond R Beyer and that they had been soliciting bids to remove the barrels from the property. He was going to call EPA and give what information he had.

File _____

Follow-Up-Action: _____

Tickle File: _____

Follow-Up By: _____

Copy/Route To: _____

000050

Originator's Initials

JAH

Environmental and Government

ONE CONVERSATION RECD

Conversation with:

Name Joanne Schnell

Company Raymond Betz Co

Address _____

Date 6/26/87

Time 1410 hours AM/PM

Originator Placed Call

Originator Received Call

W.O. NO. _____

Phone 873-4444

Subject Grant Rd site

Notes:

Called Raymond Betz Co in regards to drums located on 6-25-87 at Grant St and 149 Hwy. Joanne indicated that the property off of Hwy 149 that is described to her was indeed managed by her firm and that they had become aware of the barrels on this property some six weeks ago and that the action she had taken was to solicit bids for removal.

She had been unsuccessful in her endeavor to complete the job and she actually only received one bid. At this time she has no idea what the barrels contain and did not know what she should do. The property was purchased by a group of investors in 1982 and has been under the management of R Betz since then to their knowledge the barrels were not on the property when they purchased it.

File _____

Tickle File _____

Follow-Up By: _____

Copy/Route To: _____

Follow-Up-Action: _____

FILED 6/26/87

SEARCHED 6/26/87

INDEXED 6/26/87

FILED 6/26/87

000051

Originator's Initials JHM

RONMENTAL PROTECTION AGENCY
Office of Enforcement

REGION 6
First International Bldg., 1201 Elm St.
Dallas, Texas 75270

2/2
000052

CHAIN OF CUSTODY RECORD

IOJ. NO.	PROJECT NAME				NO. OF CONTAINERS								REMARKS		
	<i>Project #1</i>														
NO.	DATE	TIME	COMP.	GRAB	STATION LOCATION										
	12/29/77	1115	X		Station 5A Station				1	X					12/29/77
	12/29/77	1220	X		Station 6A "				1	X					5am 16oz
	12/29/77	1225	X		Station 6A "				1	X					5am 16oz
	12/29/77	1300	X		Station 6A "				1	X					5am 16oz
Released by: (Signature) <i>Hand M. Yengue</i>				Date / Time 12/29/77 1444	Received by: (Signature)			Relinquished by: (Signature)			Date / Time	Received by: (Signature)			
Released by: (Signature)				Date / Time	Received by: (Signature)			Relinquished by: (Signature)			Date / Time	Received by: (Signature)			
Released by: (Signature)				Date / Time	Received for Laboratory by: (Signature) <i>J. G. Smith</i>			Date / Time	Remarks						

Distribution: Original Accompanies Shipment; Copy to Coordinator Field Files

EMERGENCY RESPONSE PRELIMINARY ASSESSMENT COMMENTS

CERCLIS #: TD 92 230 5195 SPILL #: _____ SITE ID#: _____OSC: James C Staves DATE 9/11/87SITE NAME: Grant Road Drum SiteADDRESS: FM 149 at Grant Rd.COUNTY: Harris CITY: Houston STATE: TX ZIP: _____PRIORITY: 1 2 ✓ 3INSPECTION STATUS: PRELIMINARY ASSESSMENT OPEN (PA) CLOSED (CPA)
INVESTIGATION OPEN (IN) CLOSED (CIN)
REMOVAL ACTION OPEN (RA) CLOSED (CRA)

COMMENTS: The site is an abandoned drum storage area located on a vacant lot behind a strip mall. A site assessment performed by TAT on 6/29/87 revealed about 40 drums in fairly good condition, and about 20 badly corroded partially or completely empty drums. Preliminary prudent scans performed on soil samples collected near the drums identified only bis-2-ethyl-hexyl phthalate and low levels at least. The information currently available for the site is insufficient to warrant a removal action. The contents of the drums are unknown.

RECOMMENDED ACTION: I recommend that a more detailed site assessment be performed by TAT. The assessment should include limited drum sampling with "Haz Cat" characteristics and sample composting.

RECEIVED
SUPERVISOR

APR 13 1992

REC'D.
CENTER

MEMO REFERRALS: SF RCRA TSCA WAT AIR PERMITS ORC COC STATE
Other

000053



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION VI
HOUSTON BRANCH
6608 HORNWOOD DRIVE
HOUSTON, TEXAS 77074

MEMORANDUM

Date: October 23, 1987

Subject: Laboratory Results for Grant Road Drum Site (7TFAKC21)

Mildred Scott for
From: Diana Ayers, Chief, Houston Branch; 6E-H

To: Charles Gazda, Chief, Emergency Response Branch; 6E-E

Attn: Gerald Fonterot, 6E-EF

Attached are the laboratory results for the subject site.
Two water samples, one soil sample, and one oil sample were
received for analysis on 9/22/87.

This is a final report.

Attachments

RECEIVED
SUPERFUND

APR 1 3 1992

REC'D
CENTER

000054



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION VI

HOUSTON BRANCH

6608 HORNWOOD DRIVE

HOUSTON TEXAS 77074

MEMORANDUM

Date: 10/22/87

Subject: Organic Laboratory Results for Grant Road Drum Site.

From: *Michael Daggett*, Michael Daggett, Chief, Organic Lab Section; 6E-HL

To: Diana Ayers, Chief, Houston Branch; 6E-H

Attached are Organic Laboratory results for samples 7TFAKC2101 thru 7TFAKC2104. All samples were analyzed for VOAs and samples 02 and 04 were also analyzed for ABNs, Pesticides and PCBs. These samples contained various VOA target compounds ranging in concentration from 46.4 ug/l to 92,000,000 ug/kg. This is a final report.

ATTACHMENTS:

000055 2/24



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION VI

HOUSTON BRANCH

6608 HORNWOOD DRIVE

HOUSTON, TEXAS 77074

MEMORANDUM

Date: October 23, 1987

Subject: Laboratory Results for Grant Road Drum Site

From: *M. Kendall Young*, M. Kendall Young, Chief, Organic Section

To: Diana G. Ayers, Chief, Houston Branch

Attached are laboratory results for the subject site. Two (2) soil and two (2) water samples were received on 9/22/87 to be analyzed for metals and cyanide. The laboratory numbers assigned were 7TFAKC2101 through 7TFAKC2104.

The water samples were insufficient in quantities to be analyzed for metals.

This is a final report.

Attachment

000056 3/24

OF 3

1.5

Date: 10/23/87

Appendix

US ENVIRONMENTAL PROTECTION AGENCY
ENVIRONMENTAL SERVICE DIVISION
HOUSTON LABORATORY SECTION

LAB SAMPLE REPORT

Activity Number: 7TFAKC21 Date Recvd: 09/22/87 Date Collected: 09/22/87
Sample Number: 1 Time Recvd: 14:00 Time Collected: 10:12

Source: GRANT RD DRUM SITE Tag Number: 6-22345
Site Description: Sta#GR01 Drum GR01
Sample Type: WATER
Sample Retention:

Param- Organic: VOA
Metals: HSL
Inorganic:
Biology:

Due Date: 10/25/87
Date Projected: 10/25/87
Date Completed: 10/23/87

Comment:

Your Initials: LC

0000574/24

ORGANIC ANALYSIS DATA

6ES-HL SAMPLE NO.: 7TFAKC2101

DATE REPORTED: 10/20/87

SAMPLE TYPE: Water

ANALYST: Richard McMillin

VOLATILE COMPOUNDS BY METHOD 624

PP#	CAS#	(ug/l)
	67-64-1	ND DL= 50
(2V)	107-02-8	ND DL=1000
(3V)	107-13-1	ND DL=1000
(4V)	71-43-2	ND DL= 20
	78-93-3	ND DL= 50
	75-15-0	ND DL= 50
(6V)	56-23-5	ND DL= 20
(7V)	108-90-7	ND DL= 20
(10V)	107-06-2	ND DL= 20
(11V)	71-55-6	ND DL= 20
(13V)	75-34-3	ND DL= 20
(14V)	79-00-5	ND DL= 20
(15V)	79-34-5	ND DL= 20
(16V)	75-00-3	ND DL= 50
(23V)	67-66-3	ND DL= 20
(29V)	75-35-4	ND DL= 20
(30V)	156-60-5	ND DL= 20
(32V)	78-87-5	ND DL= 20
(33V)	10061-02-6	ND DL= 20
	10061-01-5	ND DL= 20
(38V)	100-41-4	46.4
	519-78-6	ND DL= 50
	108-10-1	ND DL= 50
(44V)	75-09-2	ND DL= 20
(45V)	74-87-3	ND DL= 50
(46V)	74-83-9	ND DL= 50
(47V)	75-25-2	ND DL= 20
(48V)	75-27-4	ND DL= 20
(51V)	124-48-1	ND DL= 20
	100-42-5	ND DL= 50
(85V)	127-18-4	ND DL= 20
(86V)	108-88-3	ND DL= 20
(87V)	79-01-6	ND DL= 20
	108-05-4	ND DL= 50
(88V)	75-01-4	ND DL= 50
	95-47-6	1,120
	108-38-3	
	106-42-3	2,250

** NOTE: This sample was not collected in a VOA container and was received with a large volume of trapped air.

000058

5/24

ORGANIC ANALYTIC DATA

6ES-HL SAMPLE NO.: 7TFAKCC101

DATE REPORTED: 10/20/87

SAMPLE TYPE: Water

ANALYST: Richard McMillin

TENTATIVE COMPOUNDS BY METHOD 624

TEST. CONC SCANT# CAS #	(ug/l)	COMPOUND NAME
No VOA TIC's detected.		

* ANALYSTS NOTE ! - THE COMPOUNDS LISTED ARE TENATIVELY IDENTIFIED BY THE BEST MATCH WITH THE NIST/CIRA/WILCEY MASS SPECTRAL DATA BASE OR BY MANUAL MASS SPECTRA INTERPRETATION. STANDARDS WERE NOT AVAILABLE FOR CONFIRMATION OR QUANTITATION.

** Estimated concentration is based on a RF of 1.0 to internal standard !

*** NOTE: This sample was not collected in a VOA container and was received with a large volume of trapped air.

000059

624

Date: 10/23/87

Appendix Z

US ENVIRONMENTAL PROTECTION AGENCY
ENVIRONMENTAL SERVICE DIVISION
HOUSTON LABORATORY SECTION

LAB SAMPLE REPORT

Activity Number: 7TFAKC21 Date Recvd: 09/22/87 Date Collected: 09/22/87
Sample Number: 2 Time Recvd: 14:00 Time Collected: 10:20Source: GRANT RD DRUM SITE Tag Number: 6-22346
Site Description: Sta#GR02 Drum GR02
Sample Type: SOIL
Sample Retention:Param- Organic: ABN PCB PES VOA
Metals: HSE
Inorganic: CN
Biology:Due Date: 10/25/87
Date Projected: 10/25/87
Date Completed: 10/23/87

Comment:

Your Initials: LC

000060

7/24

ORGANIC ANALYSIS DATA

6ES-HL SAMPLE NO.: 7TFAKC2102

DATE REPORTED: 10/20/07

SAMPLE TYPE: Soil

ANALYST: Richard McMillin

VOLATILE COMPOUNDS BY METHOD 624

PP#	CAS#		(ug/Kg)
	67-64-1	acetone -----	ND DL= 100
(2V)	107-02-8	acrolein -----	ND DL=2000
(3V)	107-13-1	acrylonitrile -----	ND DL=2000
(4V)	71-43-2	benzene -----	ND DL= 40
	78-93-3	2-butanone -----	ND DL= 100
	75-15-0	carbon disulfide -----	ND DL= 100
(6V)	56-23-5	carbon tetrachloride -----	ND DL= 40
(7V)	108-90-7	chlorobenzene -----	ND DL= 40
(10V)	107-06-2	1,2-dichloroethane -----	ND DL= 40
(11V)	71-55-6	1,1,1-trichloroethane -----	ND DL= 40
(13V)	75-34-3	1,1-dichloroethane -----	ND DL= 40
(14V)	79-00-5	1,1,2-trichloroethane -----	ND DL= 40
(15V)	79-34-5	1,1,2,2-tetrachloroethane -----	ND DL= 40
(16V)	75-00-3	chloroethane -----	ND DL= 100
(23V)	67-66-3	chloroform -----	ND DL= 40
(29V)	75-35-4	1,1-dichloroethene -----	ND DL= 40
(30V)	156-60-5	trans-1,2-dichloroethene -----	ND DL= 40
(32V)	78-87-5	1,2-dichloropropane -----	ND DL= 40
(33V)	10061-02-6	trans-1,3-dichloropropene -----	ND DL= 40
	10061-01-5	cis-1,3-dichloropropene -----	ND DL= 40
(38V)	100-41-4	ethylbenzene -----	ND DL= 40
	519-78-6	2-hexanone -----	ND DL= 100
	108-10-1	4-Methyl-2-pentanone -----	ND DL= 100
(44V)	75-09-2	methylene chloride -----	ND DL= 40
(45V)	74-87-3	chloromethane -----	ND DL= 100
(46V)	74-63-9	bromomethane -----	ND DL= 100
(47V)	75-25-2	bromoform -----	ND DL= 40
(48V)	75-27-4	bromodichloromethane -----	ND DL= 40
(51V)	124-48-1	chlorodibromomethane -----	ND DL= 40
	100-42-5	styrene-----	ND DL= 100
(85V)	127-13-4	tetrachloroethene -----	ND DL= 40
(86V)	108-88-3	toluene -----	ND DL= 40
(87V)	79-01-6	trichloroethene -----	ND DL= 40
	100-05-4	vinyl acetate -----	ND DL= 100
(88V)	75-01-4	vinyl chloride -----	ND DL= 100
	95-47-6	o-xylene -----	ND DL= 100
	100-38-3	m-xylene and/or	
	106-42-3	p-xylene -----	ND DL= 100

000061

8/24

ORGANIC ANALYSIS DATA

GES-HL SAMPLE NO.: 7TFAKC2102

DATE REPORTED: 10/20/87

SAMPLE TYPE: Soil

ANALYST: Richard McMillin

TENTATIVE COMPOUNDS BY METHOD 624

~~- +~~

ICST.CONC1

SCAN#1 CAS #1 (ug/Kg)

COMPOUND NAME

No VOA TIC's detected.

* ANALYSTS NOTE ! - THE COMPOUNDS LISTED ARE TENATIVELY IDENTIFIED BY THE BEST MATCH WITH THE NIH/EPA/WILEY MASS SPECTRAL DATA BASE OR BY MANUAL MASS SPECTRA INTERPRETATION. STANDARDS WERE NOT AVAILABLE FOR CONFIRMATION OR QUANTITATION.

** Estimated concentration is based on a RF of 1.0 to internal standard !

000062

9/24

ORGANIC ANALYSIS DATA

6ES-HL SAMPLE NO.: 7TFAKC21-02

DATE REPORTED: 10/20/87

SAMPLE TYPE: SOIL

ANALYST: MAKVELYN HUMPHREY

HSL ACID BASE/NEUTRAL COMPOUNDS BY METHOD 625

COMPOUND	ug/KG	COMPOUND	ug/KG
Phenol	nd	Acenaphthene	dl= 600
bis(2-Chloroethyl) Ether	nd	2,4-Dinitrophenol	dl=9000
2-Chlorophenol	nd	4-Nitrophenol	dl=2400
1,3-Dichlorobenzene	nd	Dibenzofuran	dl= 600
1,4-Dichlorobenzene	nd	2,4-Dinitrotoluene	dl=1800
Benzyl Alcohol	nd	2,6-Dinitrotoluene	dl=1800
1,2-Dichlorobenzene	nd	Diethylphthalate	dl= 600
2-Methylphenol	nd	4-Chlorophenylphenyl Ether	dl=2400
bis(2-chloroisopropyl)Ether	nd	Fluorene	dl= 600
4-Methylphenol	nd	4-Nitroaniline	dl=2400
N-Nitroso-Di-n-Propylamine	nd	4,6-Dinitro-2-Methylphenol	dl=6000
Hexachloroethane	nd	N-Nitrosodiphenylamine	dl=1200
Nitrobenzene	nd	4-Bromophenylphenyl Ether	dl=2400
Isophorone	nd	Hexachlorobenzene	dl= 600
2-Nitrophenol	nd	Pentachlorophenol	dl=4500
2,4-Dimethylphenol	nd	Phenanthrone	dl= 600
Benzoic Acid	nd	Anthracene	dl= 600
bis(2-Chloroethoxy)Methane	nd	Di-n-Butylphthalate	dl= 600
2,4-Dichlorophenol	nd	Fluoranthene	dl= 600
1,2,4-trichlorobenzene	nd	Benzidine	dl=6000
Naphthalene	nd	Pyrene	dl= 600
4-Chloroaniline	nd	Butylbenzylphthalate	dl=1200
Hexachlorobutadiene	nd	3',3'-Dichlorobenzidine	dl=3000
4-Chloro-3-Methylphenol	nd	Benzo(a)Anthracene	dl=2400
2-Methylnaphthalene	nd	bis-(2-Ethylhexyl)Phthalate	dl=1200
Hexachlorocyclopentadiene	nd	Chrysene	dl=2400
2,4,6-Trichlorophenol	nd	Di-n-Octyl Phthalate	dl=1200
2,4,5-Trichlorophenol	nd	Benzo(b)Fluoranthene	dl=2400
2-Chloronaphthalene	nd	Benzo(k)Fluoranthene	dl=2400
2-Nitroaniline	nd	Benzo(a)Pyrene	dl=2400
DimethylPhthalate	nd	Indeno(1,2,3-cd) Pyrene	dl=2400
Acenaphthylene	nd	Dibenzo(a,h)Anthracene	dl=2400
3-Nitroaniline	nd	Benzo(g,h,i)Perylene	dl=2400

SEARCHED
INDEXED
SERIALIZED
FILED
10/20/87

000063

10/24

ORGANIC ANALYSIS DATA

QED HL SAMPLE NO.: 7TFAKC21-02

DATE REPORTED: 10/20/87

SAMPLE TYPE: SOIL

ANALYST: MARVELYN HUMPHREY

TENTATIVE COMPOUNDS BY METHODS 624 AND 625

SCANT#	CAS #	TEST. CONC I (ug/kg)	COMPOUND NAME
460	83449	6550	1,3-ISOBENZOFURANDIONE
551		5025	UNKNOWN
742	1622792	2480	PENTECOSANE
771		12100	UNKNOWN
1027	30072	46000	1,1'-SULFONYLBIS(4-CHLORO-)BENZENE
1079		21700	UNKNOWN
1326		7836	UNKNOWN
1370		53450	UNKNOWN
1477		30200	UNKNOWN
1552		18200	UNKNOWN
1505		221000	UNKNOWN

* ANALYSTS NOTE : - THE COMPOUNDS LISTED ARE TENATIVELY IDENTIFIED BY THE BEST MATCH WITH THE NIIH/EPA/WILEY MASS SPECTRAL DATA BASE OR BY MANUAL MASS SPECTRA INTERPRETATION. STANDARDS WERE NOT AVAILABLE FOR CONFIRMATION OR QUANTITATION.

** Estimated concentration is based on a RF of 1.0 to internal standard ! 11/24

000064

PESTICIDE/PCB ANALYSIS

6ES-HL SAMPLE NO.: 7TFAKC21-02

DATE REPORTED: 10/22/87

SAMPLE TYPE: SOIL

ANALYST: JOHN LAY

PP#	CAS#	UG/KG (PPB)
(89P)	309-00-2	ND DL=< 50
(90P)	60-57-1	ND DL=< 50
(91P)	57-74-9	ND DL=< 100
(92P)	50-29-3	ND DL=< 50
(93P)	72-55-9	ND DL=< 50
(94P)	72-54-8	ND DL=< 50
(95P)	115-29-7	ND DL=< 50
(96P)	115-29-7	ND DL=< 50
(97P)	1031-07-8	ND DL=< 50
(98P)	72-20-8	ND DL=< 50
(99P)	7421-93-4	ND DL=< 50
(100P)	76-44-8	ND DL=< 50
(101P)	1024-57-3	ND DL=< 50
(102P)	319-84-6	ND DL=< 50
(103P)	319-85-7	ND DL=< 50
(104P)	319-86-8	ND DL=< 50
(105P)	58-89-9	ND DL=< 50
(106P)	53467-21-9	ND DL=< 500
(107P)	11097-69-1	ND DL=< 500
(108P)	11104-28-2	ND DL=< 700
(109P)	11141-16-5	ND DL=< 500
(110P)	12672-29-6	ND DL=< 500
(111P)	11096-82-5	ND DL=< 500
(112P)	12674-11-2	ND DL=< 500
(113P)	8001-35-2	ND DL=< 500
	aldrin -----	ND DL=< 50
	deildrin -----	ND DL=< 50
	chlordanne-----	ND DL=< 100
	4,4'-DDT -----	ND DL=< 50
	4,4'-DDE -----	ND DL=< 50
	4,4'-DDD -----	ND DL=< 50
	a-endosulfan -----	ND DL=< 50
	b-endosulfan -----	ND DL=< 50
	endosulfan sulfate -----	ND DL=< 50
	endrin -----	ND DL=< 50
	endrin aldehyde -----	ND DL=< 50
	heptachlor -----	ND DL=< 50
	heptachlor epoxide -----	ND DL=< 50
	a-BHC -----	ND DL=< 50
	b-BHC -----	ND DL=< 50
	d-BHC -----	ND DL=< 50
	g-BHC (lindane) -----	ND DL=< 50
	PCB-1242 -----	ND DL=< 500
	PCB-1254 -----	ND DL=< 500
	PCB-1221 -----	ND DL=< 700
	PCB-1232 -----	ND DL=< 500
	PCB-1248 -----	ND DL=< 500
	PCB-1260 -----	ND DL=< 500
	PCB-1016 -----	ND DL=< 500
	toxaphene -----	ND DL=< 500
	methoxychlor -----	ND DL=< 50
	mirex -----	ND DL=< 50
	PCB-1262 -----	ND DL=< 500

000065

12/24

US EPA HOUSTON BRANCH

SAMPLE #	SOURCE	TYPE	DATE REC	DATE DIG	DATE REP
7TFAKC2102	GRANT ROAD DRUM SITE	SOIL	22-SEP-87	23-SEP-87	23-OCT-87
<u>ANALYSTS</u>	M. COLE/R.CLARK/T.SANDERS				

PARAMETER	CONCENTRATION	DET. LIMITS (DL)	UNITS
AS	10.69	0.71	MG/KG
SE	ND	7.15	MG/KG
TL	ND	0.71	MG/KG
HG	ND	0.145	MG/KG
AL	1044	159	MG/KG
SB	ND	96	MG/KG
BA	767	16	MG/KG
BE	ND	8	MG/KG
CD	ND	8	MG/KG
CA	58436	239	MG/KG
CR	8678	16	MG/KG
CO	226	32	MG/KG
CU	92	32	MG/KG
FE	31073	40	MG/KG
PB	4616	48	MG/KG
MG	12200	239	MG/KG
MN	190	8	MG/KG
NI	ND	32	MG/KG
K	3146	1594	MG/KG
AG	ND	16	MG/KG
NA	ND	797	MG/KG
SN	ND	64	MG/KG
V	ND	48	MG/KG
ZN	11429	8	MG/KG

INORGANICS

CN	<3.9	MG/KG
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COMMENTS: ANALYSIS REPORTED ON A DRY WEIGHT BASIS

ND= NONE DETECTED DL= DETECTION LIMITS

000066

13/24

Date: 10/23/87

Appendix 3

US ENVIRONMENTAL PROTECTION AGENCY
ENVIRONMENTAL SERVICE DIVISION
HOUSTON LABORATORY SECTION

LAB SAMPLE REPORT

Activity Number: 7TFAKC21 Date Recvd: 09/22/87 Date Collected: 09/22/87
Sample Number: 3 Time Recvd: 14:00 Time Collected: 10:30Source: GRANT RD DRUM SITE Tag Number: 6-22347
Site Description: Sta#GRO3 Drum GRO3
Sample Type: WATER
Sample Retention:Param- Organic: VOA
Metals: HSL
Inorganic:
Biology:Due Date: 10/25/87
Date Projected: 10/25/87
Date Completed: 10/23/87
Comment:
Your Initials: LC

000067

14/24

ORGANIC ANALYSIS DATA

6EG HL SAMPLE NO.: 77FAKC02103

DATE REPORTED: 10/20/07

SAMPLE TYPE: Water

ANALYST: Richard McMillin

VOLATILE COMPOUNDS BY METHOD 624

PP#	CASE#	(ug/l)
	67-64-1	ND DL= 50
(20V)	107-02-8	ND DL=1000
(3V)	107-13-1	ND DL=1000
(4V)	71-43-2	ND DL= 20
	73-93-3	ND DL= 50
	75-15-0	ND DL= 50
(6V)	56-23-5	ND DL= 20
(7V)	108-90-7	ND DL= 20
(10V)	107-06-2	ND DL= 20
(11V)	71-55-6	ND DL= 20
(13V)	75-34-3	ND DL= 20
(14V)	79-00-5	ND DL= 20
(15V)	77-34-5	ND DL= 20
(16V)	75-60-3	ND DL= 50
(23V)	67-66-3	ND DL= 20
(29V)	75-35-4	ND DL= 20
(30V)	106-60-5	ND DL= 20
(32V)	78-07-5	ND DL= 20
(33V)	10061 02-6	ND DL= 20
	10061 01-5	ND DL= 20
(38V)	100-41-4	ND DL= 20
	517-78-6	ND DL= 50
	108-10-1	ND DL= 50
(44V)	75-69-2	ND DL= 20
(45V)	74-07-3	ND DL= 50
(46V)	74-03-9	ND DL= 50
(47V)	75-25-2	ND DL= 20
(48V)	75-27-4	ND DL= 20
(51V)	124-48-1	ND DL= 20
	100-42-5	ND DL= 50
(85V)	127-18-4	ND DL= 20
(86V)	108-88-3	ND DL= 20
(87V)	79-01-6	ND DL= 20
	108-05-4	NP DL= 50
(88V)	75-01-4	ND DL= 50
	95-47-6	ND DL= 12,000
	108-38-3	ND DL= 20
	106-42-3	ND DL= 20
		27,000

** NOTE: This sample was not collected in a VOA container and was received with a large volume of trapped air.

000068

1724

ORGANIC ANALYSED DATA

6ES-HL SAMPLE NO.: 7TFAKC2103

DATE REPORTED: 10/29/07

SAMPLE TYPE: Water

ANALYST: Richard McMillin

TENTATIVE COMPOUNDS BY METHOD 624

TEST CONC	CAS #	COMPOUND NAME
SCAN#	I (ug/l)	
267	686	cis-1,2-dichloroethene

* ANALYSTS NOTE ! - THE COMPOUNDS LISTED ARE TENATIVELY IDENTIFIED BY THE BEST MATCH WITH THE NIH/CPA/WILEY MASS SPECTRAL DATA BASE OR BY MANUAL MASS SPECTRA INTERPRETATION. STANDARDS WERE NOT AVAILABLE FOR CONFIRMATION OR QUANTITATION.

** Estimated concentration is based on a RF of 1.0 to internal standard !

*** NOTE: This sample was not collected in a VOA container and was received with a large volume of trapped air.

000069 16/24

Date: 10/23/87

Appendix 4

US ENVIRONMENTAL PROTECTION AGENCY
ENVIRONMENTAL SERVICE DIVISION
HOUSTON LABORATORY SECTION

LAB SAMPLE REPORT

Activity Number: 7TFAKC21 Date Recvd: 09/22/87 Date Collected: 09/22/87
Sample Number: 4 Time Recvd: 14:00 Time Collected: 10:33Source: GRANT RD DRUM SITE Tag Number: 6-22348
Site Description: Sta#GR04 Drum GR04
Sample Type: SLUDGE
Sample Retention:Param- Organic: ABN PCB FES VOA
Metals: HSL
Inorganic: CN
Biology:Due Date: 10/25/87
Date Projected: 10/25/87
Date Completed: 10/23/87
Comment:
Your Initials: LC

000070

17/24

ORGANIC ANALYSIS DATA

6ES-HL SAMPLE NO.: 7TFAKC2104

DATE REPORTED: 10/26/87

SAMPLE TYPE: Sludge

ANALYST: Richard McMillin

VOLATILE COMPOUNDS BY METHOD 624

PP#	CAS#		(ug/Kg)
	67-64-1	acetone -----	ND DL=2500000
(2V)	107-02-8	acrolein -----	ND DL=50000000
(3V)	107-13-1	acrylonitrile -----	ND DL=50000000
(4V)	71-43-2	benzene -----	ND DL=1000000
	78-93-3	2-butanone -----	ND DL=2500000
	75-15-0	carbon disulfide -----	ND DL=2500000
(6V)	56-23-5	carbon tetrachloride -----	ND DL=1000000
(7V)	108-90-7	chlorobenzene -----	ND DL=1000000
(10V)	107-06-2	1,2-dichloroethane -----	ND DL=1000000
(11V)	71-55-6	1,1,1-trichloroethane -----	ND DL=1000000
(13V)	75-34-3	1,1-dichloroethane -----	ND DL=1000000
(14V)	79-00-5	1,1,2-trichloroethane -----	ND DL=1000000
(15V)	79-34-5	1,1,2,2-tetrachloroethane -----	ND DL=1000000
(16V)	75-00-3	chloroethane -----	ND DL=2500000
(23V)	67-66-3	chloroform -----	ND DL=1000000
(29V)	75-35-4	1,1-dichloroethene -----	ND DL=1000000
(30V)	156-60-5	trans-1,2-dichloroethene -----	ND DL=1000000
(32V)	78-87-5	1,2-dichloropropane -----	ND DL=1000000
(33V)	10061-02-6	trans-1,3-dichloropropene -----	ND DL=1000000
	10061-01-5	cis-1,3-dichloropropene -----	ND DL=1000000
(38V)	100-41-4	ethylbenzene -----	22,300,000
	519-78-6	2-hexanone -----	ND DL=2500000
	108-10-1	4-methyl-2-pentanone -----	ND DL=2500000
(44V)	75-09-2	methylene chloride -----	ND DL=1000000
(45V)	74-87-3	chloromethane -----	ND DL=2500000
(46V)	74-83-9	bromomethane -----	ND DL=2500000
(47V)	75-25-2	bromoform -----	ND DL=1000000
(48V)	75-27-4	bromodichloromethane -----	ND DL=1000000
(51V)	124-48-1	chlorodibromomethane -----	ND DL=1000000
	100-42-5	styrene -----	ND DL=2500000
(85V)	127-18-4	tetrachloroethene -----	ND DL=1000000
(86V)	108-88-3	toluene -----	1,350,000
(87V)	79-01-6	trichloroethene -----	6,100,000
	108-05-4	vinyl acetate -----	ND DL=2500000
	75-01-4	vinyl chloride -----	ND DL=2500000
	95-47-6	o-xylene -----	33,400,000
	108-38-3	m-xylene and/or -----	
	106-42-3	p-xylene -----	92,000,000

000071 8/24

ORGANIC ANALYTIC DATA

GEO-HL SAMPLE NO.: 7TFAK02104

DATE REPORTED: 10/26/87

SAMPLE TYPE: Sludge

ANALYST: Richard McMillin

TENTATIVE COMPOUNDS BY METHOD 624

SCAN #	TEST CONC CAS # (ug/Kg)	COMPOUND NAME
No VOA TIC's detected.		

* ANALYST'S NOTE ! - THE COMPOUNDS LISTED ARE TENATIVELY IDENTIFIED BY THE BEST MATCH WITH THE NIH/EPA/WILEY MASS SPECTRAL DATA BASE OR BY MANUAL MASS SPECTRA INTERPRETATION. STANDARDS WERE NOT AVAILABLE FOR CONFIRMATION OR QUANTITATION.
** Estimated concentration is based on a RF of 1.0 to internal standard !

000072

14/20

ORGANIC ANALYSIS DATA

6ES-HL SAMPLE NO.: 7TFAKC21-04

DATE REPORTED: 10/20/87

SAMPLE TYPE: SOIL

ANALYST: MARVELYN HUMPHREY

HSL ACID BASE/NEUTRAL COMPOUNDS BY METHOD 625

COMPOUND	ug/KG	COMPOUND	ug/KG
Phenol	nd	Acenaphthene	nd
bis(2-Chloroethyl) Ether	nd	2,4-Dinitrophenol	nd
2-Chlorophenol	nd	4-Nitrophenol	nd
1,3-Dichlorobenzene	nd	Dibenzofuran	nd
1,4-Dichlorobenzene	nd	2,4-Dinitrotoluene	nd
Benzyl Alcohol	nd	2,6-Dinitrotoluene	nd
1,2-Dichlorobenzene	nd	Diethylphthalate	nd
2-Methylphenol	nd	4Chlorophenylphenyl Ether	nd
bis(2chloroisopropyl)Ether	nd	Fluorene	nd
4-Methylphenol	nd	4-Nitroaniline	nd
N-Nitroso-Di-n-Propylamine	nd	4,6-Dinitro-2-Methylphenol	nd
Hexachloroethane	nd	N-Nitrosodiphenylamine	nd
Nitrobenzene	nd	4-Bromophenylphenyl Ether	nd
Isophorone	nd	Hexachlorobenzene	nd
2-Nitrophenol	nd	Pentachlorophenol	nd
2,4-Dimethylphenol	nd	Phenanthrene	nd
Benzoic Acid	nd	Anthracene	nd
bis(2-Chloroethoxy)Methane	nd	Di-n-Butylphthalate	nd
2,4-Dichlorophenol	nd	Fluoranthenes	nd
1,2,4-trichlorobenzene	nd	Benzidine	nd
Naphthalene	nd	Pyrene	nd
4-Chloroaniline	nd	Butylbenzylphthalate	nd
Hexachlorobutadiene	nd	3,3'-Dichlorobenzidine	nd
4-Chloro-3-Methylphenol	nd	Benzo(a)Anthracene	nd
2-Methylnaphthalene	nd	bis(2Ethylhexyl)Phthalate	nd
Hexachlorocyclopentadiene	nd	Chrysene	nd
-,4,6-Trichlorophenol	nd	Di-n-Octyl Phthalate	nd
2,4,5-Trichlorophenol	nd	Benzo(b)Fluoranthenes	nd
2-Chloronaphthalene	nd	Benzo(k)Fluoranthenes	nd
2-Nitroaniline	nd	Benzo(a)Pyrene	nd
DimethylPhthalate	nd	Indeno(1,2,3-cd) Pyrene	nd
Acenaphthylene	nd	Dibenzo(a,h)Anthracene	nd
3-Nitroaniline	nd	Benzo(g,h,i)Perylene	nd
			120000

000073

20
24

ORGANIC ANALYSIS DATA

6E6-HL SAMPLE NO.: 77FAKC21-04

DATE REPORTED: 10/20/87

SAMPLE TYPE: SOIL

ANALYST: MARVELYN HUMPHREY

TENTATIVE COMPOUNDS BY METHODS 624 AND 625

TEST. CONC1

SCAN#1 CAS # (ug/KG) | COMPOUND NAME

153 | 17302282 99500 | 2,6-DIMETHYL NONANE

212 | | 93200 | UNKNOWN

220 | 25155151 94300 | (1-METHYLETHYL)-METHYL BENZENE

230 | 17588891 107000 | 2-ETHYL-1,4-DIMETHYL BENZENE

257 | 111202141 753000 | UNDECANE

365 | | 173000 | UNKNOWN HYDROCARBON

1033 | 80079 952000 | 1,1'-SULFONYL BIG(4-CHLORO)BENZENE

1263 | | 11470000 | UNKNOWN

1268 | | 12230000 | UNKNOWN

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* ANALYST'S NOTE ! - THE COMPOUNDS LISTED ARE TENATIVELY IDENTIFIED BY THE BEST MATCH WITH THE NBS/EPA/WILEY MASS SPECTRAL DATA BASE OR BY MANUAL MASS SPECTRA INTERPRETATION. STANDARDS WERE NOT AVAILABLE FOR CONFIRMATION OR QUANTITATION.

** Estimated concentration is based on a RF of 1.0 to internal standard! 81/64

000074

PESTICIDE/PCB ANALYSIS

SES-HL SAMPLE NO.: 7TFAKC21-04

DATE REPORTED: 10/22/87

SAMPLE TYPE: OIL

ANALYST: JOHN LAY

PP#	CAS#	UG/KG (PPB)
(89P)	309-00-2	ND DL=< 50
(90P)	60-57-1	ND DL=< 50
(91P)	57-74-9	ND DL=< 100
(92P)	50-29-3	ND DL=< 50
(93P)	72-55-7	ND DL=< 50
(94P)	72-54-8	ND DL=< 50
(95P)	115-29-7	ND DL=< 50
(96P)	115-29-7	ND DL=< 50
(97P)	1031-07-8	ND DL=< 50
(98P)	72-20-8	ND DL=< 50
(99P)	7421-93-4	ND DL=< 50
(100P)	76-44-8	ND DL=< 50
(101P)	1024-57-3	ND DL=< 50
(102P)	319-84-6	ND DL=< 50
(103P)	319-85-7	ND DL=< 50
(104P)	319-86-8	ND DL=< 50
(105P)	58-89-9	ND DL=< 50
(106P)	53469-21-9	ND DL=< 500
(107P)	11097-69-1	ND DL=< 500
(108P)	11104-28-2	ND DL=< 700
(109P)	11141-16-5	ND DL=< 500
(110P)	12672-29-6	ND DL=< 500
(111P)	11096-82-5	ND DL=< 500
(112P)	12674-11-2	ND DL=< 500
(113P)	8001-35-2	ND DL=< 500
	aldrin -----	ND DL=< 50
	deildrin -----	ND DL=< 50
	chlordane-----	ND DL=< 100
	4,4'-DDT -----	ND DL=< 50
	4,4'-DDE -----	ND DL=< 50
	4,4'-DDD -----	ND DL=< 50
	a-endosulfan -----	ND DL=< 50
	b-endosulfan -----	ND DL=< 50
	endosulfan sulfate -----	ND DL=< 50
	endrin -----	ND DL=< 50
	endrin aldehyde -----	ND DL=< 50
	heptachlor -----	ND DL=< 50
	heptachlor epoxide -----	ND DL=< 50
	a-BHC -----	ND DL=< 50
	b-BHC -----	ND DL=< 50
	d-BHC -----	ND DL=< 50
	g-BHC (lindane) -----	ND DL=< 50
	PCB-1242 -----	ND DL=< 500
	PCB-1254 -----	ND DL=< 500
	PCB-1221 -----	ND DL=< 700
	PCB-1232 -----	ND DL=< 500
	PCB-1248 -----	ND DL=< 500
	PCB-1260 -----	ND DL=< 500
	PCB-1016 -----	ND DL=< 500
	toxaphene -----	ND DL=< 500
	methoxychlor -----	ND DL=< 50
	Mirex -----	ND DL=< 50
	PCB-1262 -----	ND DL=< 500

000075

20/2

US EPA HOUSTON BRANCH

SAMPLE #	SOURCE	TYPE	DATE REC	DATE DIG	DATE REP
7TFAKC2104	GRANT ROAD	SOIL	22-SEP-87	23-SEP-87	23-OCT-87
ANALYSTS	DRUM SITE				
	M. COLE/R. CLARK/T. SANDERS				

PARAMETER	CONCENTRATION	DET. LIMITS (DL)	UNITS
-----------	---------------	---------------------	-------

AS	5.42	0.78	MG/KG
SE	ND	7.79	MG/KG
TL	ND	0.78	MG/KG
HG	ND	0.189	MG/KG
AL	1702	184	MG/KG
SB	481	110	MG/KG
BA	467	18	MG/KG
BE	ND	9	MG/KG
CD	ND	9	MG/KG
CA	36751	276	MG/KG
CR	5033	18	MG/KG
CO	135	37	MG/KG
CU	62	37	MG/KG
FE	6273	46	MG/KG
PB	7591	55	MG/KG
MG	7276	276	MG/KG
MN	112	9	MG/KG
NI	ND	37	MG/KG
K	ND	1838	MG/KG
AG	ND	18	MG/KG
NA	ND	919	MG/KG
SN	ND	55	MG/KG
V	ND	18	MG/KG
ZN	6046	9	MG/KG

INORGANICS

CN	<23.6	MG/KG
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COMMENTS: ANALYSIS REPORTED ON A DRY WEIGHT BASIS

ND= NONE DETECTED DL= DETECTION LIMITS

000076 23/04



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION VI

HOUSTON BRANCH

6608 HORNWOOD DRIVE

HOUSTON, TEXAS 77074

October 23, 1987

10/23/87

MEMORANDUM

SUBJECT: Notice of Intent to Dispose of Samples

FROM: *Diana Ayers*, Diana Ayers, Chief, Houston Branch; 6E-H

TO: Charles Gazda, Chief, Emergency Response Branch; 6E-E

The Houston Laboratory is required to dispose of all hazardous wastes we generate in a manner consistent with RCRA regulations. This includes all samples received for analysis provided we find them to contain contaminants which classify them as RCRA hazardous wastes.

I have included this memorandum in the final analytical report to serve as notice to the program that we have completed all analysis. If we have any of the original sample remaining after analysis is complete we will dispose of it within 90 days. Please note that even though original sample may be left over, it does not mean that a reanalysis of the sample may be requested since the sample has most likely exceeded its holding time and any subsequent analysis may not be valid.

If you have a need to hold these samples in custody longer than 90 days, please sign below and return this memorandum to me within the next 30 days. Also, state briefly your need to hold these samples in custody.

Thank you for your cooperation in this request.

Grant Road Drum Site (7TFAKC21)

Facility Name

Program Manager

Date

000077

24/21

TXD982305195

SITE ASSESSMENT REPORT

For

Grant Road Drum Site
Houston, Harris County, Texas

Prepared for

EPA - REGION VI
EMERGENCY RESPONSE BRANCH

J. Chris Petersen
Deputy Project Officer

By

Ecology and Environment, Inc.
Technical Assistance Team

RECEIVED
SUPERIOR

APR 1 3 1992

REC'D
CENTER

November 16, 1987



ecology and environment, inc.

1509 MAIN STREET, SUITE 814, DALLAS, TEXAS 75201, TEL. 214-742

International Specialists in the Environment

recycled paper

000078



ecology and environment, inc.

1509 MAIN STREET, SUITE 814, DALLAS, TEXAS 75201, TEL. 214-742-6601

TXD982305195

International Specialists in the Environment

Date: November 16, 1987
To: James Staves, OSC
Region VI, Emergency Response Branch
Thru: J. Chris Petersen, DPO
Region VI, Emergency Response Branch
Thru: William Goode, TATL
Region VI, Technical Assistance Team
From: Robert Marguccio, ATATL *~~~~~*
Region VI, Technical Assistance Team
Subj: Site Assessment and Sampling
Grant Road Drum Site
Houston, Harris County, Texas
TDD# T06-8709-17
PAN# TTX0587SAC

On September 22, 1987, TAT members Marguccio, Yeager, Hardin and Donohue, accompanied OSCs Staves and Ryan, to perform a site assessment at the Grant Road Drum Site. The site is located on a heavily wooded lot in the northern part of Houston, Harris County, Texas.

The TAT investigated the drums, sampled open containers and documented site conditions. The report has been organized in a Draft Removal Action Memorandum outline in an attempt to facilitate site activities.

Attachments:

Draft Removal Action Memorandum
Site Map and Sketch
Photographs and Negatives
Logbook copy
Record of Communication
Chain of Custody
Copy of TDD

000079

Draft Removal Action Memorandum
Grant Road Drum Site
Houston, Harris County, Texas

I. Purpose

A preliminary assessment, performed by the EPA On-scene coordinator and the Technical Assistance Team, at the Grant Road Drum Site, Houston, Harris County, Texas. In accordance with National Contingency Plan Guidelines, the OSC has identified that there exists a potential threat to public health or welfare or the environment, posed by the presence of approximately sixty deteriorated and abandoned drums. The drums have been shown to contain significant concentrations of hazardous substances including various volatile organics and heavy metals.

The OSC has determined that this site meets the criteria as specified in SARA and the National Contingency Plan for an Immediate Removal, prompting this request.

II. Background

The site is located north of Grant Road and west of State Route 149, in the northern portion of Houston, Harris County, Texas. The property is a heavily vegetated and wooded lot which is generally flat.

The property contains approximately sixty 55-gallon drums in various degrees of deterioration. Nearly all of the drums appear to be full and several drums are open.

It has been determined, through communication with the Texas Water Commission, that the property management firm which handles the property is the Raymond R. Betz Company. The company has stated that the property, which contains the drums, was purchased by a group of investors in 1982. It was also learned that the property may have been the previous location of a fertilizer or pesticide operation.

Access to the site is currently unrestricted and there is evidence that children play on or adjacent to the property. The drums are well rusted, precariously stacked and exposed to the continued effects of the weather.

The site is situated approximately 100 feet from active businesses to the northeast, two-tenths of a mile from local residences, churches and a daycare center and four-tenths of a mile, to the west, of Cypress Creek High School. The site is also approximately two miles from a local well water field and Greens Bayou, which is a tributary to Buffalo Bayou and Galveston Bay, to the south.

000080

3/14

On September 22, 1987 the OSC and TAT performed an assessment, which included the investigation of the drums, the collection of four samples from the open containers and the documentation of site conditions. Nearly all of the drums appeared to be full. The open drums proved to contain liquids, sludges and solids or combinations of several phases. Samples were collected from all three matrices for analysis. The samples were delivered to and analyzed by the EPA Region VI, Houston Branch, Houston Laboratory. All samples were analyzed for volatile organics (VOAs). These samples contained various VOA target compounds ranging in concentration from 46.4 ug/l to 92,000,000 ug/kg. The slugde and solid samples were also analyzed for acid base/neutrals (ABN), pesticides and PCBs, and metals and cyanide. The samples were shown to contain significant concentrations of o-xylene, m-xylene and/or p-xylene, ethyl benzene, toluene, trichloroethene, lead, chromium, and various tentative organic compounds.

The site has not received a Hazard Ranking System (HRS) score and, therefore, is not a National Priorities List (NPL) site.

III. Threat

Approximately sixty badly deteriorated 55-gallon drums, containing significant concentrations of volatile organic compounds and heavy metal are present at this site. In accordance with Section 300.65 of the National Contingency Plan, the OSC has determined that there is a potential threat to public health or welfare or the environment based on the following factors:

- (i) Actual or potential exposure to hazardous substances by nearby populations, due to the unrestricted access and close proximity to residences, businesses and schools;
- (ii) Potential contamination of drinking water supplies due the presence of the site within two miles of a local well water field;
- (iii) Hazardous substances in drums that pose a threat of release, due to their deteriorated condition;
- (iv) Weather conditions that may cause hazardous substances to be released or migrate;
- (v) Threat of fire or explosion due, to the significant concentrations of volatile organic compounds; and
- (vi) The lack of availability of other appropriate Federal or State response mechanisms to respond to the site.

A summary of the hazardous substances, matrices and ranges of concentration determined to be present in several drums at the site can be found in Table 1. A summary of the same hazardous substances, target organs and potential health effects can be found in Table 2.

000081

4/14

Table 1

<u>Hazardous Substance</u>	<u>Matrix</u>	<u>Concentration</u>
o-Xylene	water sludge	1,120 to 13,000 ug/l 33,400,000 ug/kg
m-Xylene and/or p-Xylene	water sludge	2,250 to 27,300 ug/l 92,000,000 ug/kg
Ethyl benzene	water sludge	46.4 ug/l 22,300,000 ug/kg
Toluene	sludge	1,350,000 ug/kg
Trichloroethene	sludge	6,100,000 ug/kg
Lead	solid sludge	4,616 mg/kg 7,591 mg/kg
Chromium	solid sludge	8,678 mg/kg 5,033 mg/kg

000082

S14

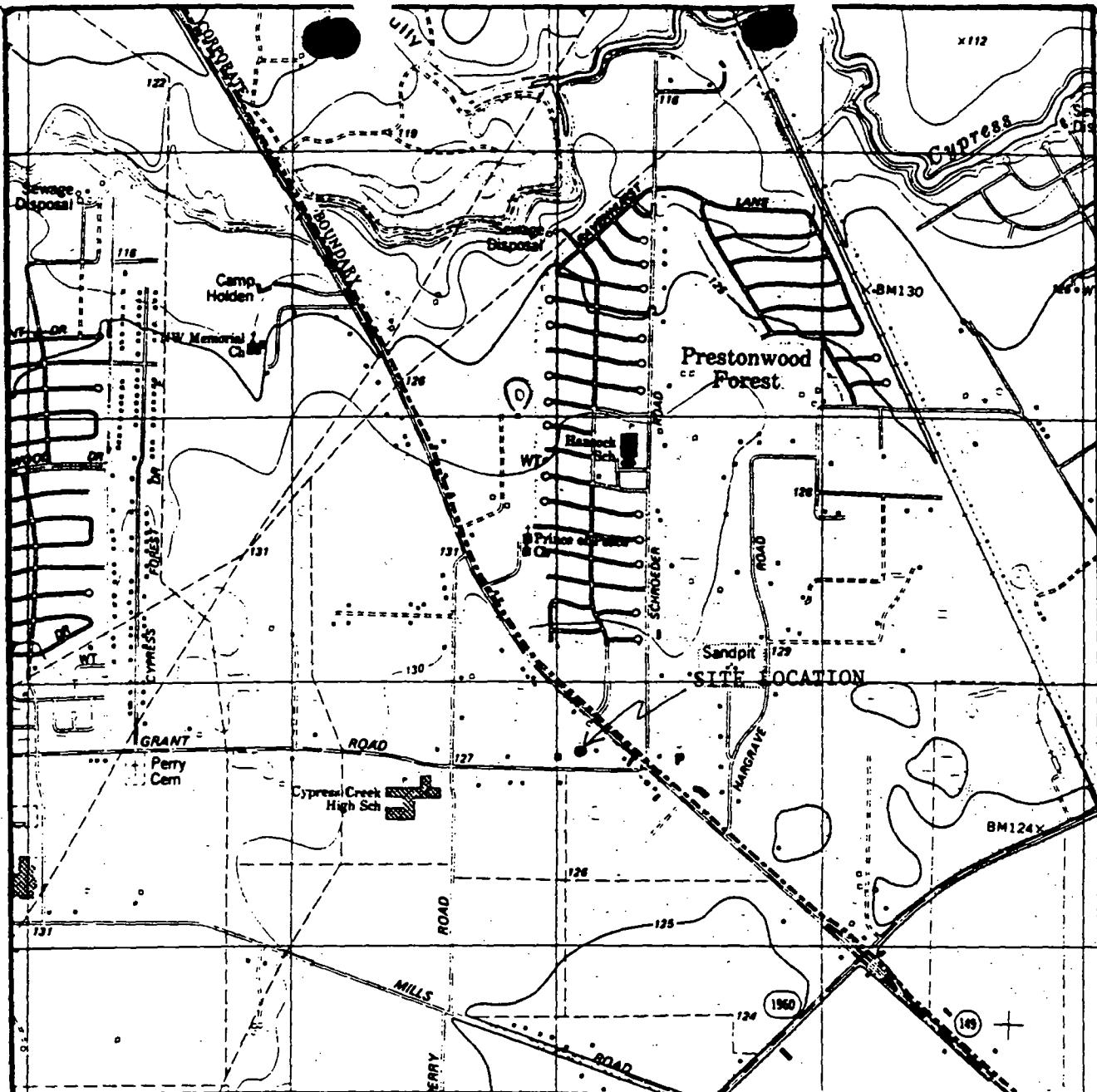
Table 2

Hazardous Substance	Target Organs	Potential Health Effects
Xylene	Blood	All cause CNS depression:
Toluene	Bone marrow	decreased alertness, loss of
Ethyl benzene	(a)CNS	consciousness. Defatting
	Eyes	dermatitis. Xylene vapor may
	Respiratory	cause irritation of the eyes,
	Skin	nose and throat. High conc.
	Liver	of vapor may cause damage to
	Kidney	the kidneys and liver. Ethyl
		benzene is a lacrimator,
		severely irritating eyes and
		mucuos membranes.
Trichloroethene	CNS	Causes CNS depression:
	Kidney	decreased alertness, loss of
	Liver	consciousness. Kidney changes:
	Skin	fatigue, malaise, liver
		enlargement and jaundice.
Lead	Blood	Both are toxic to the kidneys.
Chromium	Cardio-pulmonary	Each has its own symptom
	Gastro-intestinal	cluster. Lead causes decreased
	Liver	mental activity, weakness,
	Lung	headache, abdominal cramps,
	CNS	diarrhea and anemia. Lead can
	Skin	affect the blood-forming
		mechanism, kidney and
		peripheral nervous system.
		Lead toxicity can cause
		permanent kidney and brain
		damage. Chromium has a high
		pulmonary toxicity and has
		been implicated as a human
		carcinogen.

(a)CNS = Central Nervous System

000083

6/4



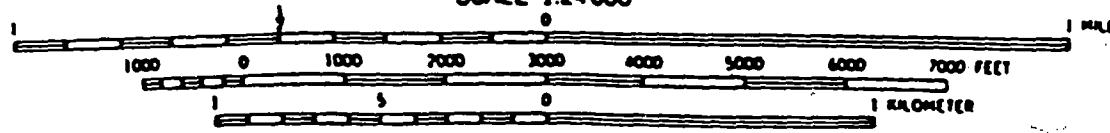
	Ecology and Environment, Inc. Technical Assistance Team Region VI	Case No: FY87-1725 PAN: TTX0587SAA	TDD No: 06-8706-37 Date : 6/30/87
Originator : Richard Yeager			

LOCATION OF GRANT ROAD SITE

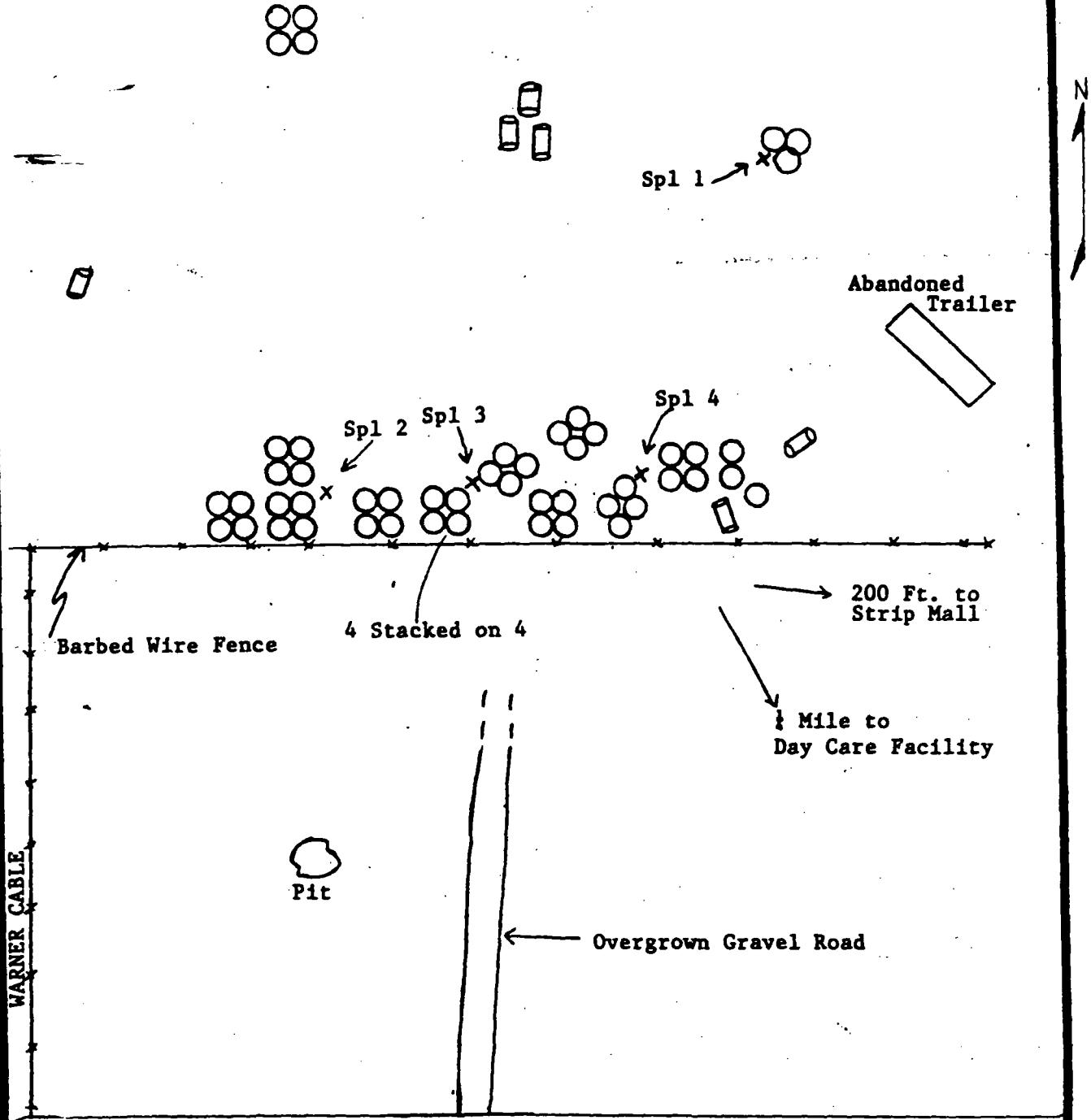
**SATSUMA QUADRANGLE
TEXAS-HARRIS CO.
7.5 MINUTE SERIES (TOPOGRAPHIC)
NE/4 ADDICKS 15' QUADRANGLE**

000084

SCALE 1:24000



7/4



	Ecology and Environment, Inc. Technical Assistance Team Region VI	Case No: Y87-17-5 PAN: TTX 0587 SAA Originator:	TDD No: 06-8706-37 Date: 6/30/87 Richard Yeager
--	---	---	---

9/14

000036



Page 1 of 4

TDD# : T06-8709-17

Photographer / Witness

Marguccio/ Yeager, Hardin, Donohue

Date / Time / Direction

9/22/87 0920 South

Comments: TAT performing air monitoring
of drums using an organic vapor analyzer.

Note the heavy vegetative cover and
deteriorated condition of the drums



Photographer / Witness

Marguccio/ Yeager, Hardin, Donohue

Date / Time / Direction

9/22/87 0925 South

Comments: View of stacked, deteriorated
and overgrown drums.

000687

Page 1 of 4
TDD#: T06-8709-17

Photographer / Witness

Marguccio/ Yeager, Hardin, Donohue

Date / Time / Direction

9/22/87 0920 South

Comments: TAT performing air monitoring
of drums using an organic vapor analyzer.
Note the heavy vegetative cover and
deteriorated condition of the drums

Photographer / Witness

Marguccio/ Yeager, Hardin, Donohue

Date / Time / Direction

9/22/87 0925 South

Comments: View of stacked, deteriorated
and overgrown drums.

GRANT ROAD DRUM SITE — TUESDAY 9-27-87
 MARGUCCIO, HARON, DONOHUE AND YEAGER IN HOUSTON TAT VEHICLE:
 DEPARTED HOTEL 0720 ARRIVED SITE 0800. 0805 CONVOCED

SAFEM MEETING. DISCUSSED OBJECTIVES WITH OSC. SET-UP

FOR SITE ENTRY. OVA BACKGROUND 1.6 ppm. ENTRY 0915.

RAD BACK GROUND 0.0 INITIAL ENTRY AROUND DRUMS

= NO EXPLOSIVE READINGS, ONE GREY DRUM WITH OPEN

BUNG READ 25 ppm 2 CONTAINERS OPEN. TAT

CLEARING BRUSH. DRUMS TO NORTH, ONE OPEN

RUSTED OVA - 15 ppm. ONE BLACK CYLINDER INITIALLY

FOUND 9 DRUMS TO NORTH. ENTRY COMPLETE) 0940.

2nd ENTRY STARTED 1000 SAMPLE GRO1 TAKEN J.HARON

1012. ~~1020~~ RM GRO2 1020 REC SOLID — ~~fm~~

OVA ON GRO1 DRUM... AFTER ~~1020~~ RM SAMPLE

TAKEN 1020 ppm WALKED TO DRUMS TO NORTH.

OPEN TOP DRUM GRO3, FOR LIQUID PHASE TAKEN

1030. GRO3S FOR SOLID PHASE - GEN TO BRICK REO

SLUDGE, TAKEN 1033 OFF AIR AT END OF ENTRY

1033. DRY SUPPLIES AND EQUIPMENT. "BREAK"

DECON SUPPLIES AND EQUIPMENT. REFILLED TANKS OF AIR.

COMPLETED CHAIN OF CUSTODY AND SAMPLE INFO! SEALED

COOLER FOR DELIVERY TO HOUSTON LAB 146. DROVE TO

HOUSTON LAB. ARRIVED 1355 HOURS, DELIVERED SAMPLES. DISCUSSED

TURNAROUND TIME FOR ANALYSIS. SETTLED ON 30 DAYS, UNLESS

OSC CONTACTS WAS TO CHANGE! RETURNED TO HOUSTON TAT

OFFICE. RETURNED LARGE AIR CYLINDERS(?) AND PICKED UP

TWO MORE FOR TOMORROW'S ASSESSMENT. PROCEEDED TO HOTEL.

PHONE CONVERSATION RECORD

Conversation with:

Name JIM STAVES, CSCDate 10 / 28 / 87Company EPATime 1600

AM/PM

Address _____

 Originator Placed Call

Phone _____

 Originator Received CallSubject GROUT ROAD SITE ASSESSMENT

Notes: STAVES RETURNED CALL OF ORIGINATOR. OSC HAS RECEIVED DATA FROM DOWM SAMPLING. TATM REQUESTED AN EXTENSION / AMENDMENT OF TAD UNTIL WEEK OF NOVEMBER 16 - 20, TO COMPLETE REPORT. TAT WILL USE ACTION ITEM FORMATT FOR REPORT. REPORT WILL SUBMIT DATED NOV. 20.

- File _____
 Tickle File _____ / _____ / _____
 Follow-Up By: _____
 Copy/Route To: _____

Follow-Up-Action: _____

Originator's Initials Rmn

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12/14

CHAIN OF CUSTODY RECORD

1/14

PROJ. NO.	PROJECT NAME GRANT RD#2 DRUM SITE TSD 482305195				NO. OF CON- TAINERS	RECEIVED BY RELEASER	REMARKS
IMPLERS: (Signature) John H. Harlan Robert H. Long							
STATION LOCATION	DATE	TIME	COMP.	GRAB			
DRUM DR#1				X	1	X	TAG NO. 6-22345
DRUM DR#2				X	1	X	" " 6-22346
DRUM DR#3 LIQUID PHASE				X	1	X	" " 6-22347
DRUM DR#3 SOLID PHASE				X	1	X	" " 6-22348
RElinquished by: (Signature)							
Date / Time		Received by: (Signature)		Relinquished by: (Signature)		Date / Time	Received by: (Signature)
1/22/87 12:56							
RElinquished by: (Signature)							
Date / Time		Received by: (Signature)		Relinquished by: (Signature)		Date / Time	Received by: (Signature)
RElinquished by: (Signature)							
Date / Time		Received for Laboratory by: (Signature)		Date / Time	Remarks		
		Troy Carter		1/22/87 14:00			

14/14

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CHAIN OF CUSTODY RECORD

PROJ. NO.	PROJECT NAME GRANT ROAD DRUM SITE TAG # 982305195					NO. OF CONTAINERS	RECEIVED BY					REMARKS
MPLERS: (Signature)					RELEASED BY							
STATION LOCATION	DATE	TIME	COMP.	GRAB	1	2	3	4	5	6	7	
DRUM 6202				X								TAG NO. 6-22345
DRUM 6202				X								" " 6-22346
DRUM 6203 LIQUID PHASE				X								" " 6-22347
DRUM 6203 SOLID PHASE				X								" " 6-22348
RElinquished by: (Signature)	Date / Time	Received by: (Signature)			Relinquished by: (Signature)					Date / Time	Received by: (Signature)	
	2-27-1976											
RElinquished by: (Signature)	Date / Time	Received by: (Signature)			Relinquished by: (Signature)					Date / Time	Received by: (Signature)	
RElinquished by: (Signature)	Date / Time	Received for Laboratory by: (Signature)			Date / Time	Remarks						
		John C. Allen			2-27-1976							

**THE ENFORCEMENT ATTACHMENT OF THE ACTION MEMORANDUM IS
CONFIDENTIAL.**

RECEIVED
SUPERIOR COURT

APR 1 3 1992

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MAIL CENTER**

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UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION VI

1445 ROSS AVENUE, SUITE 1200
DALLAS, TEXAS 75202

MEMORANDUM

SUBJECT: ACTION MEMORANDUM

Request for Removal Action at the Grant Road Drum Site
Houston, Harris County, Texas
Cerclis #: TXD982305195
Site/Spill ID: G-2
Category of Removal: Time Critical

FROM: James C. Staves *JP*
On-Scene Coordinator
Field Response Section (6E-EF)

TO: Robert E. Layton Jr., P.E.
Regional Administrator (6A)

THRU: Russell F. Rhoades *RFL*
Director
Environmental Services Division (6E)

I. PURPOSE

This memorandum requests approval for a Removal Action pursuant to the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA) and the Superfund Amendments and Reauthorization Act (SARA) at the Grant Road Drum Site. The proposed action involves removing sixty 55-gallon drums suspected to contain waste solvents and paint pigments from an easily accessible, unused field in Houston, Harris County, Texas.

This action meets the Criteria for initiating a removal action under section 300.65 of the National Contingency Plan (NCP) and is anticipated to require less than twelve months and \$2 million for completion.

II. BACKGROUND

The Grant Road Drum Site was discovered during an Emergency Response Branch Investigation of a citizen complaint from an employee of a nearby business. The initial investigation revealed about fifty drums, several of which were labelled "anhydrous aluminum chloride", in a field behind a strip mall and daycare center. The explosive nature of this compound prompted an immediate follow up investigation that included sampling. Samples taken from a few drums that were open, and soils around drums that may have leaked failed to confirm the presence of aluminum compounds but identified other hazardous chemicals.

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The origin of the drums is unknown, although an employee of the nearby Warner Cable Company believed that the property had once been used by a "fertilizer or pesticide place". The property is now owned by the Raymond R. Betz Company, a property management firm, who bought the land without knowledge of the abandoned drums.

A. Site Description:

The abandoned drums are located on a wooded tract of land to the east of the Warner Cable hub station at 9602 Grant Road, Harris County, Houston (see figure 1). Forty-nine 55-gallon drums are located to the north of an east-west barbed-wire fence. Another eleven drums are scattered through underbrush to the north (see figure 2). Most of the drums are upright, and some are still on pallets. Most are so badly rusted that the labels are illegible, but some are clearly marked "Anhydrous Aluminum Chloride". None of the drums appeared to be leaking, but the corrosion is threatening their physical integrity. There is little evidence of human traffic around the drums, although what appears to be a child's fort is located about 300 feet to the south.

A strip mall is located about 200 feet to the east of the drums and a child daycare center is located one quarter mile to the southeast. Access to the drums is not restricted in any fashion.

The site is not on the NPL and has not received a HRS score. The site will probably not score high enough to be placed on the NPL.

B. Incident Characteristics:

The Emergency Response Branch learned of the site on June 25, 1987 through a citizen complaint from an employee of the Warner Cable Company hub station. Several of the drums were reportedly labeled "anhydrous aluminum chloride", which is a compound that can react explosively with water. The TAT performed a preliminary assessment on the same date and confirmed the presence of the drums. The Texas Water Commission (TWC) was contacted on June 26. TWC revealed that they had performed an investigation of the site in mid-May, but had only found about ten drums that appeared to contain waste paint sludges.

Because of the inconsistency in the investigation findings, a meeting involving the OSC, TAT, and the TWC representative was conducted on-site on June 29. A site tour revealed two different drum disposal sites, obscured from each other by dense underbrush. The drums appeared to have been in place for five to ten years. Due to the age of the drums that were open, it appeared unlikely that any of the drums contained the highly corrosive and reactive compound, anhydrous aluminum chloride.

The TWC representative had already been in coordination with the property owners, The Raymond R. Betz Company, and received verbal assurance that they would begin soliciting bids from qualified disposal companies.

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C. Quantity and Types of Substances Present.

During the site visit of June 29, 1987, and an additional sampling mission performed on September 22, 1987, TAT sampled four of the sixty drums and collected soil samples around some of the more badly corroded drums. These were analyzed by the EPA Houston Laboratory.

None of the soil samples contained hazardous substances. The drums contained three different physical phases; liquids, sludges and solids. Analytical results for each of these phases are presented in the following table.

Hazardous Substance	Matrix	Concentration
o-Xylene	water sludge	1,120 to 13,000 ug/l 33,400,000 ug/kg
m-Xylene and/or p-Xylene	water sludge	2,250 to 27,300 ug/l 92,000,000 ug/kg
Ethyl benzene	water sludge	46.4 ug/l 22,300,000 ug/kg
Toluene	sludge	1,350,000 ug/kg
Trichloroethene	sludge	6,100,000 ug/kg
Lead	solid sludge	4,616 mg/kg 7,591 mg/kg
Chromium	solid sludge	8,678 mg/kg 5,033 mg/kg

D. State and Local Authorities Roles.

The Texas Water Commission performed the initial site investigation in mid-May, 1987. TWC coordinated with the landowner and informed them of their obligations under Superfund for site cleanup.

The Texas Water Commission and the Harris County pollution control department could not commit funds for the cleanup due to higher priorities at other sites.

E. Other Actions to Date.

No actions have been undertaken by private parties or public agencies abate the health threat at the site.

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III. THREAT TO PUBLIC HEALTH OR WELFARE OF THE ENVIRONMENT

A. Threats to Public Health and Welfare:

The principle threat posed by the site is the potential for direct contact with hazardous chemicals in the drums. Xylene, toluene, ethylbenzene, and trichloroethene all cause central nervous system depression, skin defatting, and liver damage, and trichloroethene is a probable carcinogen. Lead and chromium are both nephrotoxic. Lead can cause permanent brain damage and chromium has a high pulmonary toxicity and has been implicated as a human carcinogen.

The drums are badly corroded, precariously stacked, and exposed to the continuing effects of weather. None of the open drums sampled contained volatile organic compounds in concentrations sufficient to pose a significant threat of fire or explosion. However, since the concentrations of volatile organic compounds in the unopened drums are unknown, this threat cannot be discounted.

Access to the site is currently unrestricted, and there are several local human activity centers that could be affected in the event of a catastrophic release. The site is located approximately 200 feet from a strip mall to the northeast, two-tenths of a mile from residences, churches, and a daycare center, and four-tenths of a mile to the west of Cypress Creek High School.

B. Threats to the Environment.

The site is approximately two miles from Green Bayou, which is a tributary to Buffalo Bayou and Galveston Bay to the south. These aquatic ecosystems would be threatened in the event of a catastrophic release and a rainfall runoff period. Such a release would also contaminate large quantities of soil and threaten the local terrestrial ecosystems.

IV. ENFORCEMENT

See attachment 1.

V. PROPOSED ACTIONS AND COSTS

The proposed action at this site consists of staging and sampling of the drums, followed by disposal, by methods appropriate for the materials present. If all drums are found to contain the known materials present, the preferred disposal method would be incineration. Any analysis of alternate disposal methods, will include considerations of cost effectiveness and consistency with CERCLA waste disposal policies. Any visibly stained soils encountered during the removal will be excavated, replaced with clean soil, and regraded to the natural topographic contours.

The proposed action will permanently mitigate the threat posed by the potential for direct human contact with hazardous substances at the Grant Road Drum Site. The proposed action therefore constitutes the entire remedial action for the site.

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B. Summary of Costs:

Since the contents of all drums are not known, the disposal costs estimates were based on incineration. This estimate represents the worst case scenario with respect to disposal cost, and should cover all expenses associated with any other appropriate disposal methods.

EXTRAMURAL COSTS

ERCS Cleanup Contractor	\$120,000
TAT Costs	14,000
CLP Costs	0
ERT Contract	0
IAG's	0
Subtotal Extramural Direct Costs	\$134,000
15% Contingency of Above Costs	20,100
Total Extramural Costs	\$154,100

INTRAMURAL COSTS

Intramural Direct Costs	\$9,000
Intramural Indirect Costs	18,000
Total Removal Project Ceiling	\$181,100

VI. EXPECTED CHANGE IN THE SITUATION SHOULD NO ACTION BE TAKEN OR ACTION BE DELAYED

The drums will continue to corrode due to the effects of weathering and potential corrosive characteristics of the contained waste materials. The wooden pallets on which the drums are stacked will also deteriorate, which could cause some of the drums to fall. Both of these outcomes greatly increase the potential for a significant release of hazardous materials, and also increase the probability of direct human exposure and environmental contamination.

VII. RECOMMENDATION

Because conditions at the site meet the NCP section 300.65 (b) (2) criteria for a removal, I recommend your approval of the proposed removal action. The estimated total project costs are \$181,100, of which \$120,000 are for extramural cleanup contractor costs. Please indicate your approval or disapproval by signing below.

APPROVED:

DATE:

8/12/88

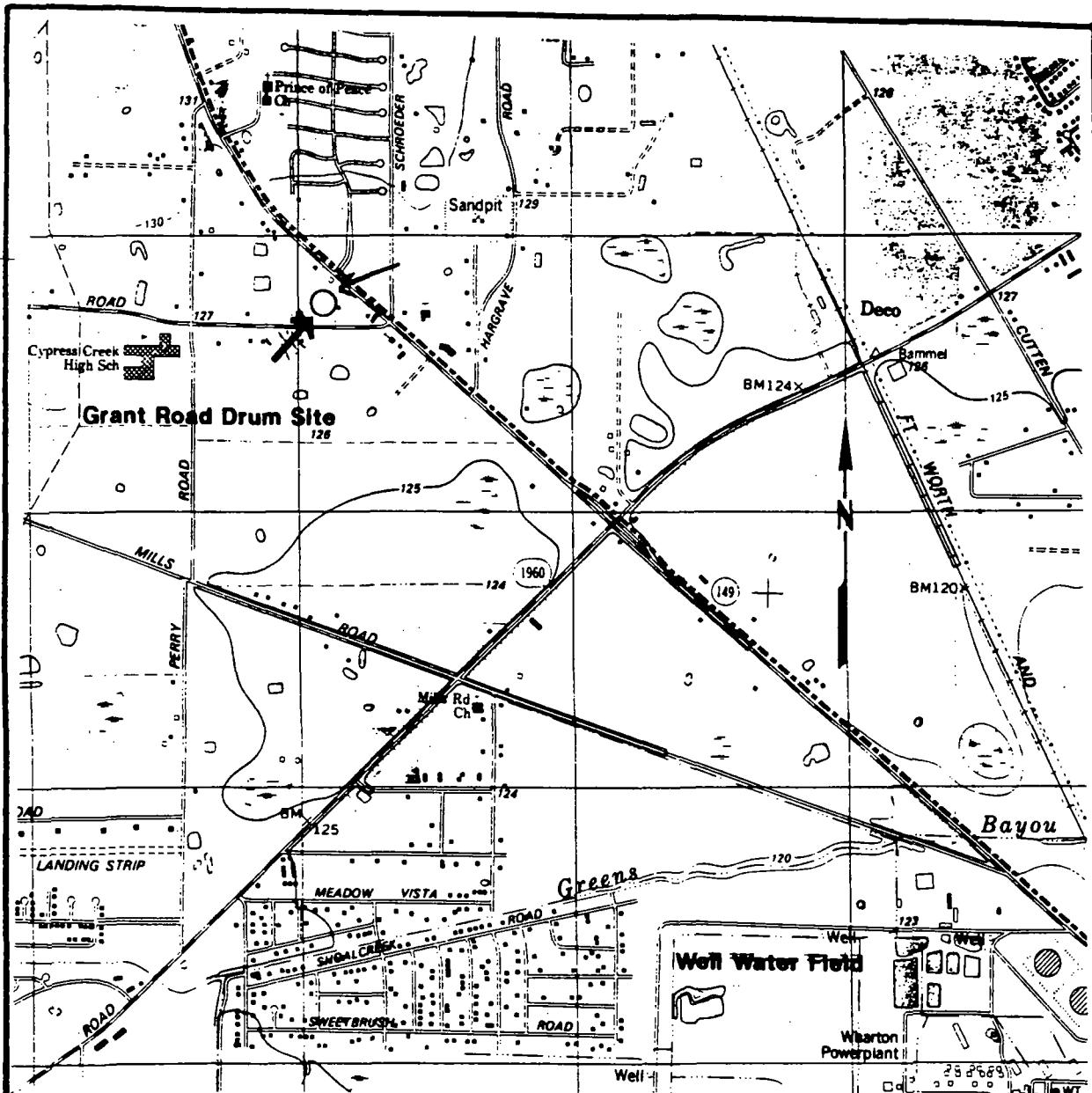
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DISSAPPROVED:

DATE:

62-0010

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**Ecology and Environment, Inc.
Technical Assistance Team
Region VI**

T D D 8 8 2 3 0 5 1 9 5

TDD No: T06-8709-17

PAN: TTX0587SAC

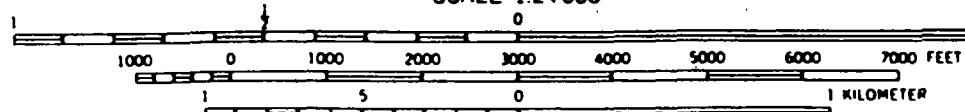
Date : 10/23/87

Originator : Robert Marguccio

Grant Road Drum Site
Satsuma Quadrangle
Texas-Harris Co.
7.5 Minute Series (Topographic)

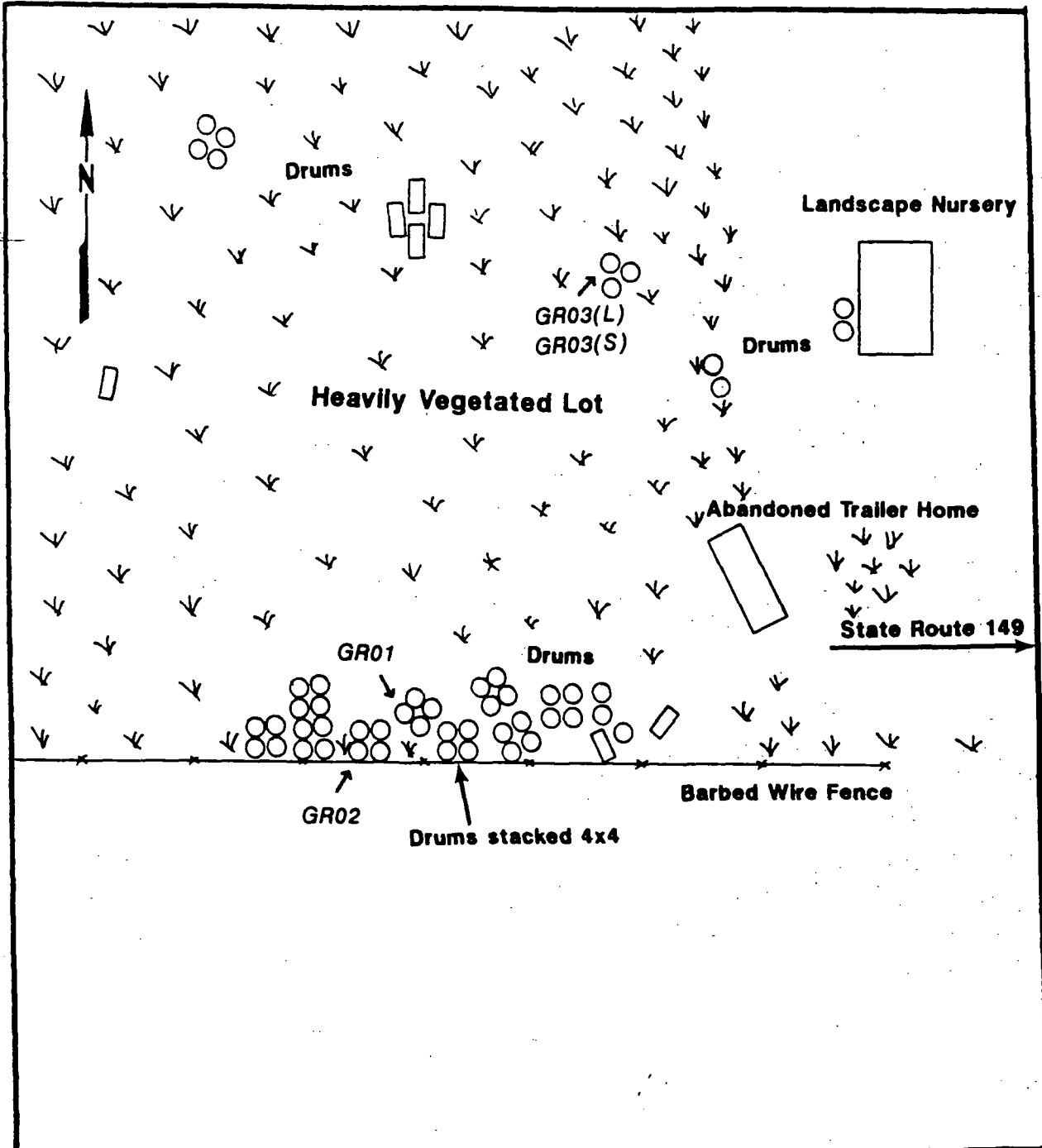
FIGURE 1

SCALE 1:24000



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	Ecology and Environment, Inc.	TXD982305195	TDD No: T06-8709-17
	Technical Assistance Team	PAN : TTX0587SAC	Date : 10/23/87
	Region VI		
	Originator : Robert Marguccio		

Grant Road Drum Site
Site Sketch and Sample Location Map
Houston, Harris County, Texas

(Not to Scale)

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FIGURE 2.

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